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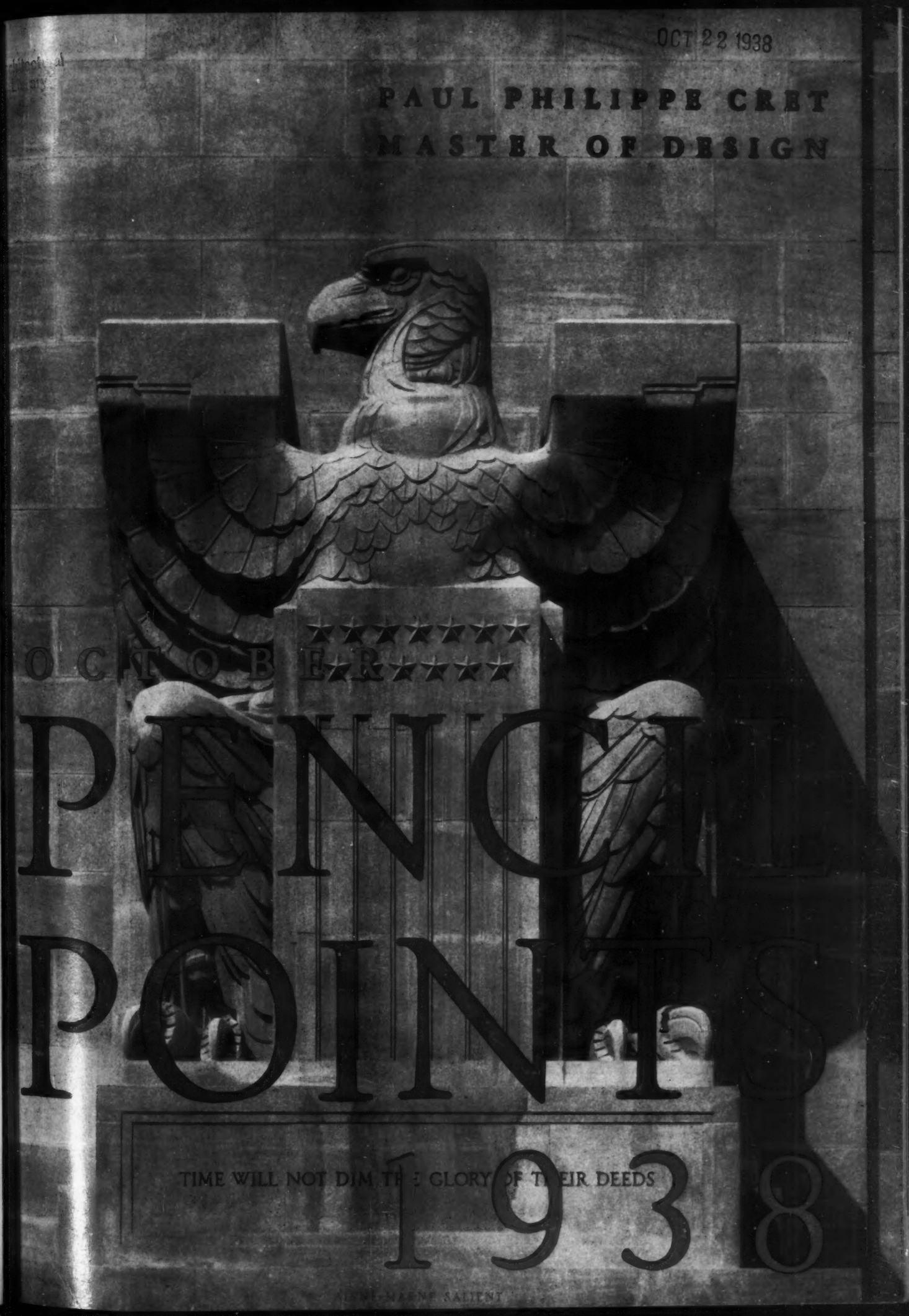
PAUL PHILIPPE CRET
MASTER OF DESIGN
OCTOBER
PENCIL POINTS
TIME WILL NOT DIM THE GLORY OF THEIR DEEDS
1938

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PENCIL POINTS

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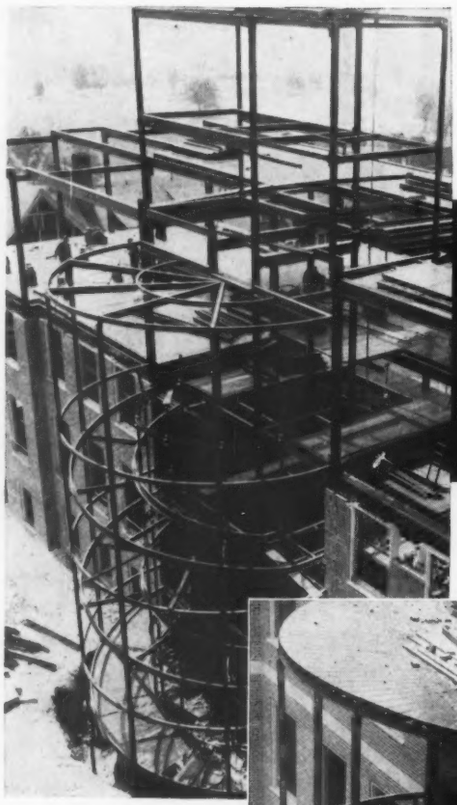
Floors, Roofs and Ramps are



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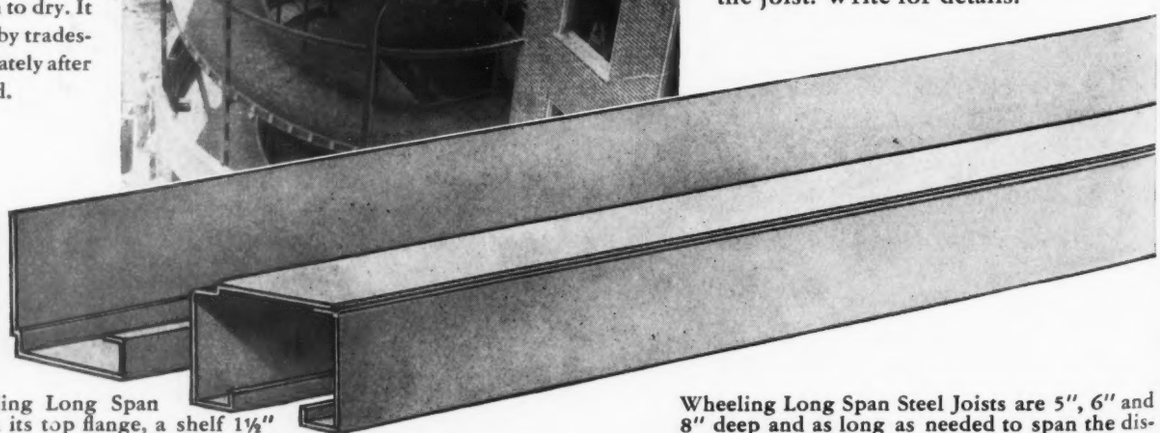

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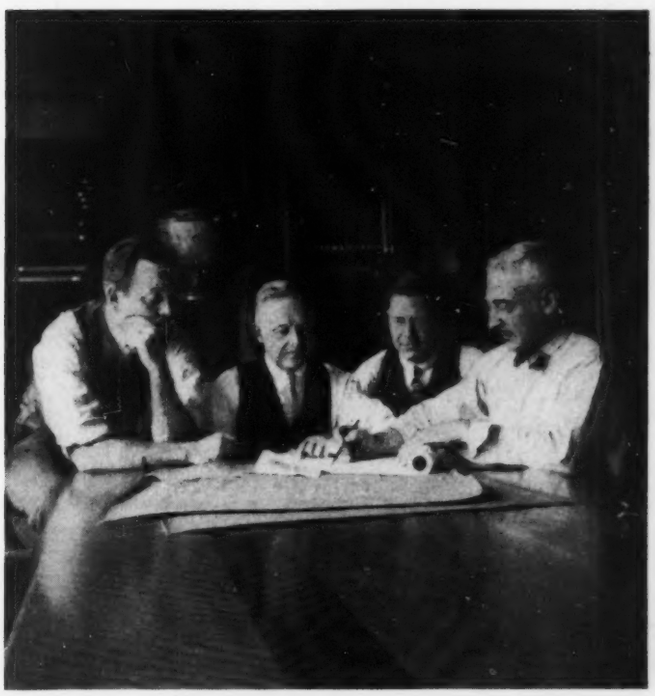
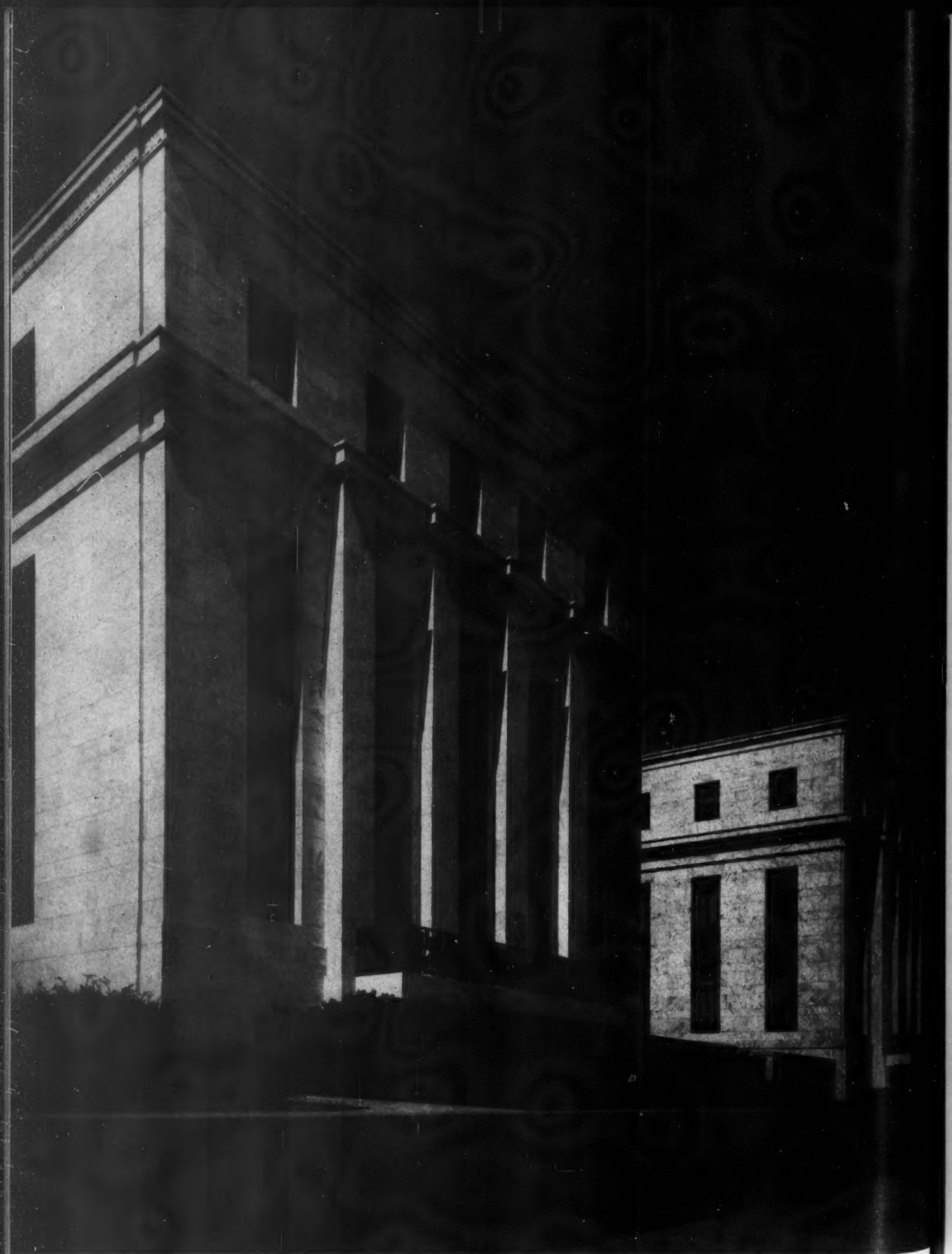
PAUL PHILIPPE CRET whose career as Architect and Educator has had a far-reaching influence on his times and won him the respect and admiration of architect and cultivated layman alike. His four partners, to whom he attributes much credit for such merit as is found in the firm's work, are shown below in characteristic conference in the office library. Reading from left to right they are Roy F. Larson, William J. H. Hough, William H. Livingston, and John F. Harbeson





Rittase

608 FEDERAL RESERVE BOARD BUILDING, WASHINGTON—18TH STREET SIDE

PAUL PHILIPPE CRET
MASTER OF DESIGN

BY KENNETH REID

THERE is reason to believe that when the history of architecture in America is finally summed up the name of Paul Philippe Cret will be prominently included. For surely, among his generation, he is one of the acknowledged leaders. The evidence of his executed works leaves no question as to his exceptional skill as designer. The evidence of successes registered by scores of his former pupils now in practice points to his high ability as educator. The recognition he has received in the form of honors and awards bestowed by lay and professional bodies attests to the quality of his citizenship and service to his fellow man. No lily-gilding words of praise are necessary to prove to this audience that he is, to paraphrase a locution frequently heard in Boston, an architect of the first water and the deepest dye.

The equipment Cret brought to the United States from France and the Ecole in 1903 included a rather thorough acquaintance with the historic background of architecture and the design philosophy and technique then current. (This scholarship he has since persistently and steadily added to.) It included a clear, logical mind and the disposition to accept its conclusions. It included a passionate urge to seek and find and create order and beauty—an order and beauty determined by his particular brand of that complex known as taste. And in his case the taste, let us agree, was excellent.

Upon these foundations he has builded, during a practice of thirty-odd years, tempering his initial eclecticism with more and more of personal creativeness as he matured, achieving progress by seeking "continual slight novelty" rather than revolutionary originality. True originality in art, he feels, is arrived at only by the mature artist and is much over-rated as an immediate goal for the young. "Hitch your wagon to the star of Beauty," he says in effect, "and whatever you may have of originality will not wither through contact with what others have done before you." His works prove his words.

Cret has two habits of working that mark him as different from most other practitioners. These peculiarities have been commented on elsewhere but it may be worthwhile to recall them now. The first is to visualize his buildings during design principally in terms of their sections. Many designers, in their mind's eye, see things in perspective as they work out the plans and elevations, but Cret sees straight through the walls. He once said "A good plan is one from which may rise good rooms in a good sequence; its test, therefore, lies in the sections resulting from its lines. The sections are the diagram of the whole composition, and ought to be its source."

The second noteworthy habit that prevails in Cret's office is that of studying detail completely with full size drawings rendered in charcoal. Many architects do this but few to the extent insisted upon by Cret. It is said that few F.S.D.'s have ever gone out of the establishment without his own hand having worked over them, refining profiles and modeling forms so that nothing is left to chance. The photographs that follow show the results of this consistent study.

In a world as generally troubled as ours, man prizes his moments of peace and tranquillity. The architectural world, too, is troubled with doubts and fears, and the din of conflicting theories about design is often confusingly loud. In the midst of it all, it is refreshing and reassuring to come upon one man who maintains his serene conviction that the quest for beauty must not be abandoned in pursuit of fashion; who has faith that architecture performs functions beyond and above the material—functions which it is the architect's duty to recognize and take into account.

Such a man is Paul Cret, quietly going his own way, genuinely interested in what others are doing with their experiments in searching for new forms and ready to applaud when they push ahead the frontiers and extend the possibilities of architectural expression, yet for himself not sharing their restlessness. He still believes there is a deal of beauty to be discovered within the realms of symmetry.

The Pan-American Union in Washington; done in association with Albert Kelsey in 1908

Courtyard of the famous Detroit Institute of Arts. Zanzinger, Borie, and Medary associated with Cret on this project in 1922

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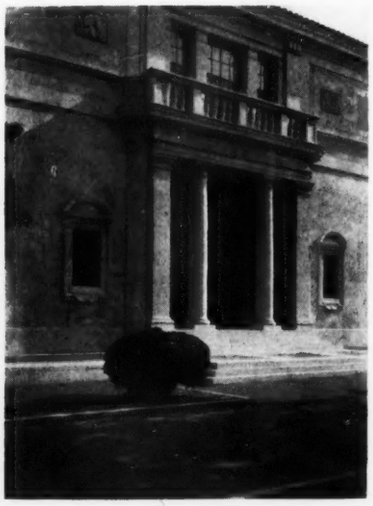
The Rodin Museum, Philadelphia, Paul Cret and Jacques Greber, Associated Architects, 1928

Art School for the John Herron Art Institute, Indianapolis. Designed by Cret in 1928



Wallace

The Barnes Foundation Museum in Philadelphia, done in 1923

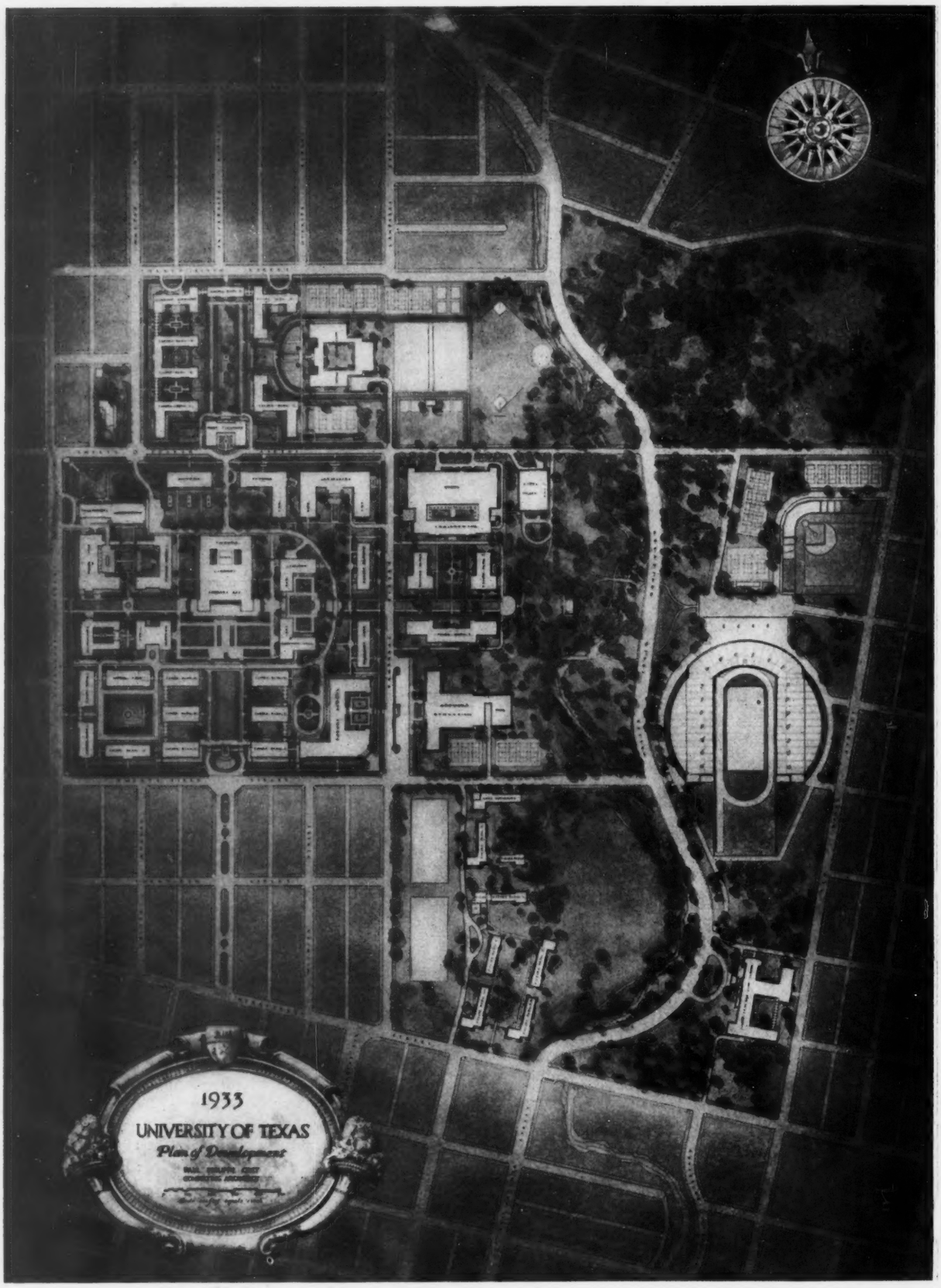
The Washington, D. C., Heating Plant Cret did in 1933 was greatly admired for its good proportions

Commercial Photo Co.

Cret contributed to the interest of the Century of Progress, 1933, by designing the Hall of Science

Hedrich-Blessing

Just completed at West Point are a new Academic Building, a new Barracks, and an extension to the Gymnasium, designed by Cret. Photo shows Gym end



Cret was Consulting Architect for the University of Texas in connection with its plan for future development. The Library shown opposite is on the principal axis hereabove

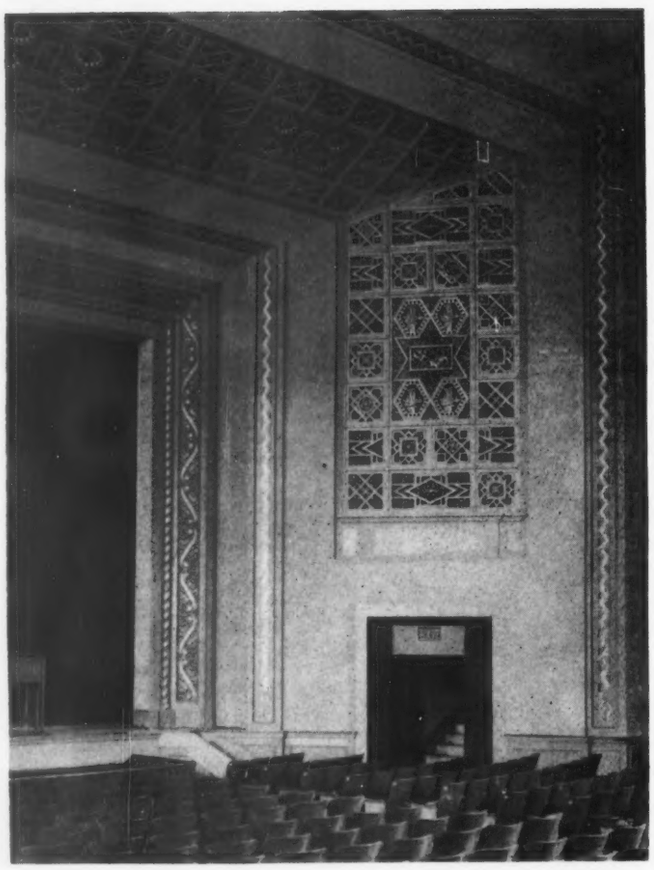
Paralta Studios

613 UNIVERSITY OF TEXAS LIBRARY (WITH ROBERT LEON WHITE AS ASSOCIATE)

PAUL P. CRET
MASTER OF DESIGN

Paralta Studios

A view of the Union Building and an interior detail of the Hogg Auditorium, both at the University of Texas and both built in 1932. Cret was Consulting Architect on these buildings while Robert Leon White was the Architect of Record. The clients desired something with a Spanish flavor in all these Texas buildings but, though the Spanish influence is unquestionably there, it has been filtered through Cret's personal feeling for fitness and harmony

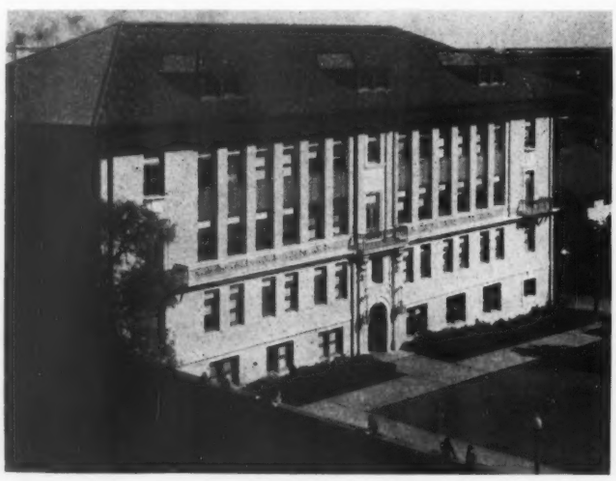


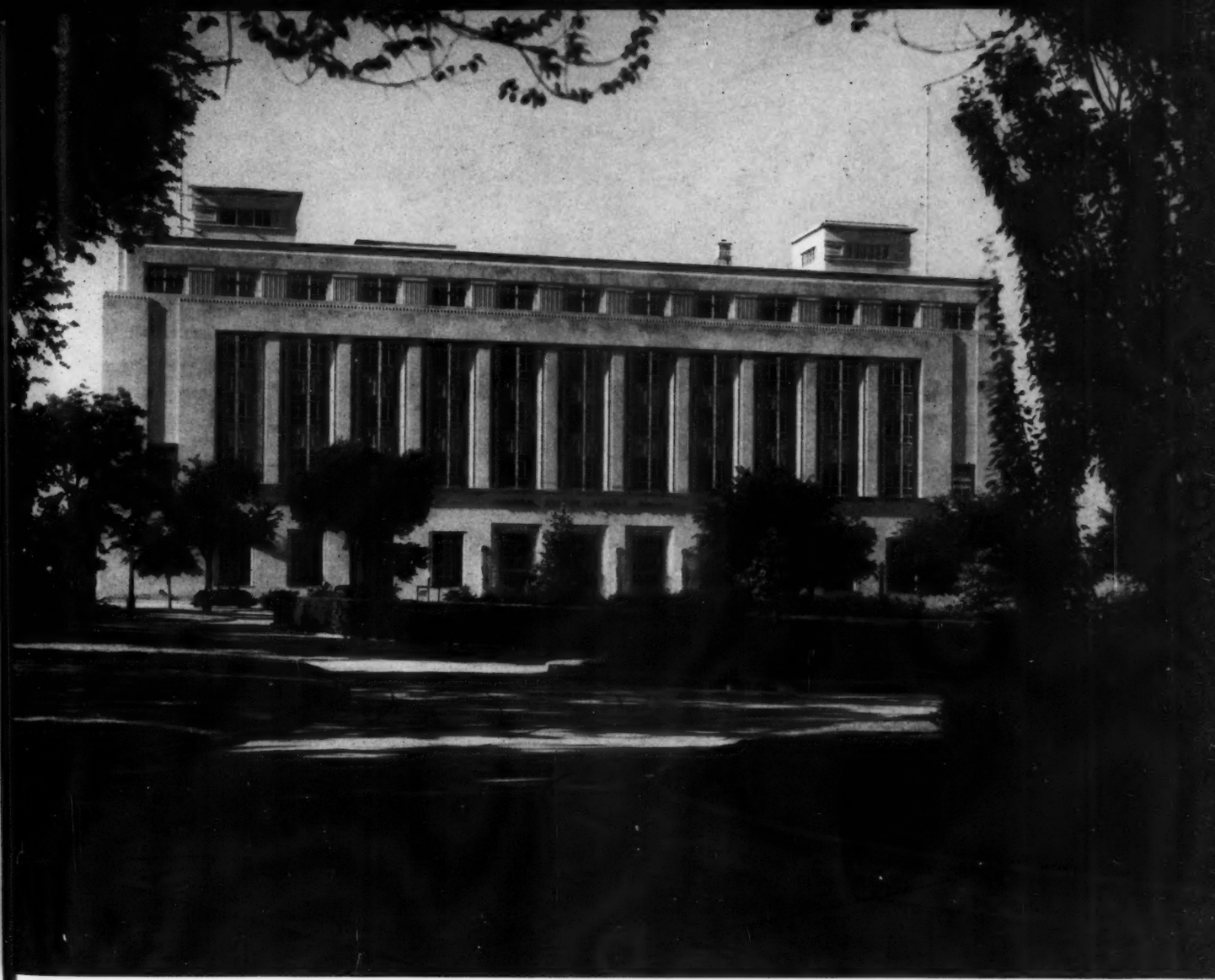
Paralta Studios

The courtyard of the Architectural Building of the University of Texas has, since 1931, shed its quiet influence for good taste upon the students of the school. Cret had a definite hand in creating this influence for he acted as Consulting Architect, working with Architects Green, LaRoche, and Dahl. The building is of Texas stone—Cordova shell walls with Cordova trim

Photos by Paralta

Three others of the Texas University group built in 1931 are the Physics Building (top), and the Geology and Home Economics buildings (left and right below). Green, LaRoche, and Dahl were again the Architects with Mr. Cret as Consulting Architect. While the details are clearly based on Spanish precedent, the buildings are designed for contemporary use to house the activities of a modern university





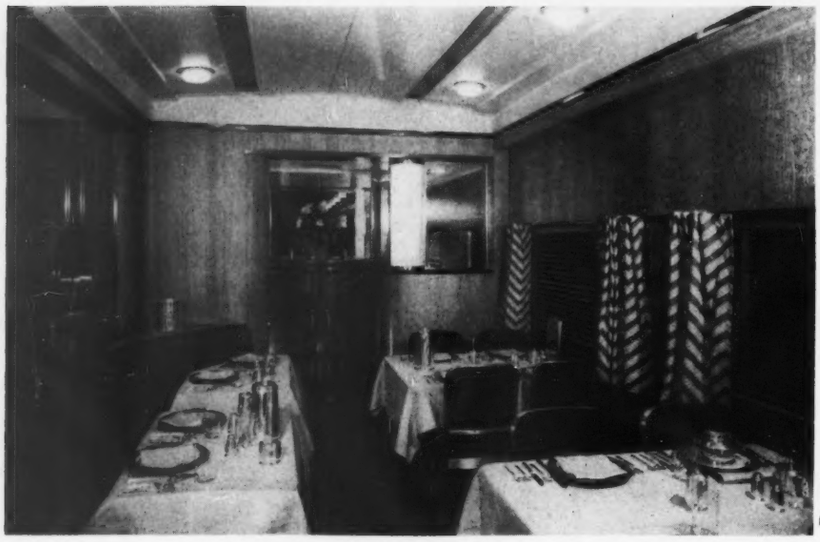
Cret has designed several federal court house buildings in recent years, including this one in Fort Worth, Texas, which dates from 1932. It is a combined Post Office and Court House. Wiley G. Clarkson was associated with Cret on this project of graceful and delicate dignity

Photos by Sigurd Fischer

The Hartford County Building, the commission for which Cret won in association with Smith & Bassette in competition in 1926, adheres more closely to the classic than some of his later public buildings. Yet it has a freshness and personal quality that marks it as Cret's own. Quite definitely it states a theme later elaborated upon in such compositions as the Folger Library, the Fort Worth Court House, or the Federal Reserve Board Building. Both the song and the variations are possessed of distinctive beauty

Dooner

Not so obviously Cret's, yet showing evidence of his logic and good taste, are the train interiors he has done in recent years. Here is the "Cocktail Tavern" of the Reading Crusader, placed in service last year. It is at once efficiently commodious and æsthetically satisfying



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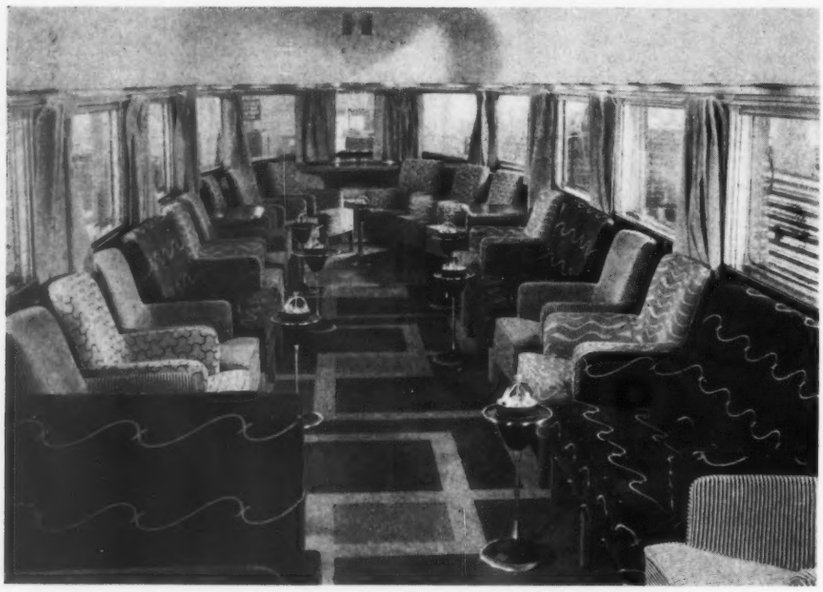

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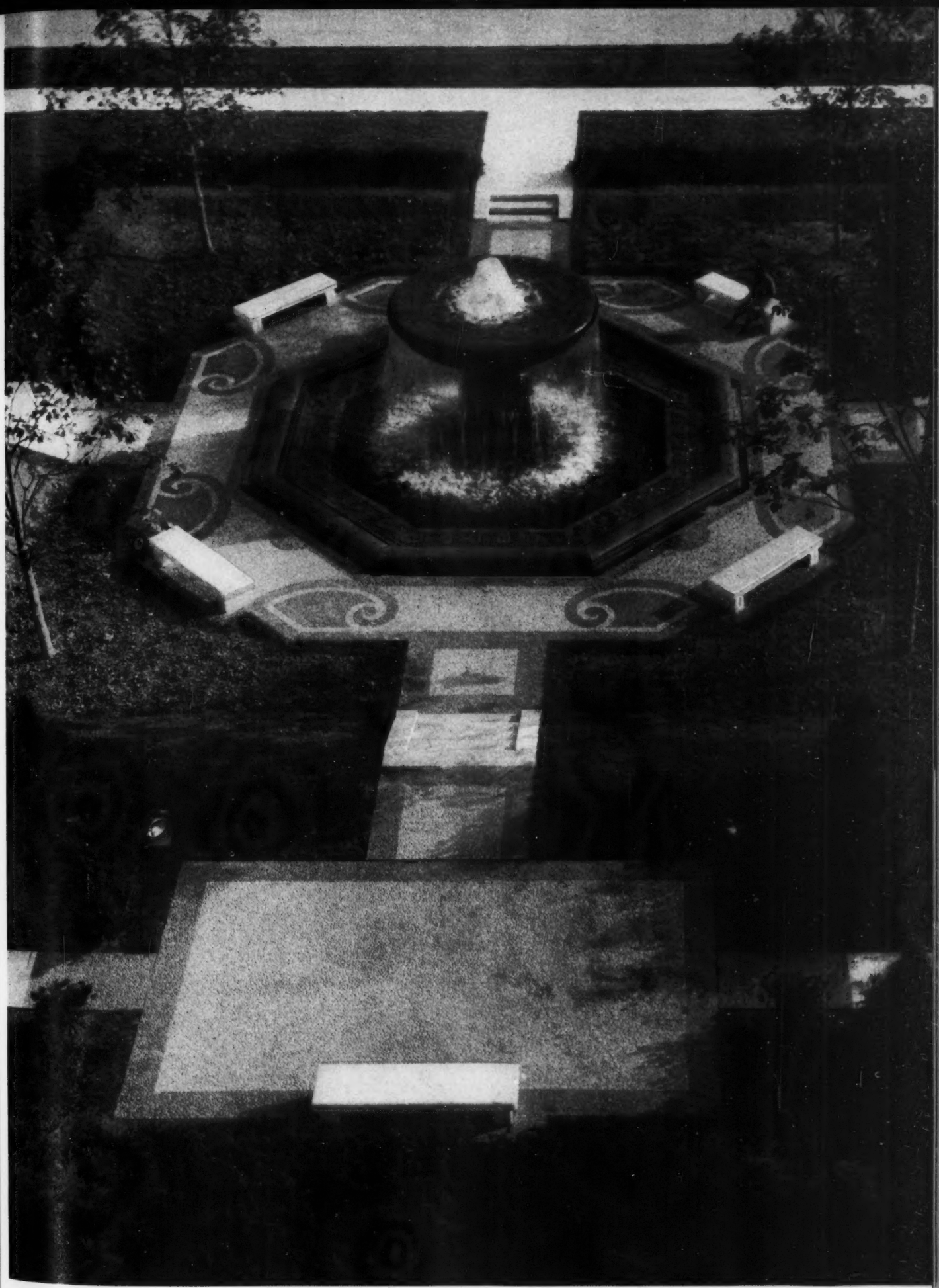
A dining car for the Pennsylvania Railroad, done in 1938; an observation car for the Burlington "Denver Zephyr," dated 1936; and a streamlined locomotive and train for the Reading Lines (1937)

Dooner

The attractive Cocktail Lounge in the Santa Fe "Super-Chief" and a coach for the Burlington "Denver Zephyr" were added to Cret's list of accomplishments in 1936. The client for all trains shown here was the Edward G. Budd Manufacturing Company

The Federal Reserve Board Building in Washington has won plenty of applause for designer Cret. Here are shown a view in the court, a detail of the Constitution Avenue façade, and one of the lamps at C St. entrance

Photos by Rittase



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623 GARDEN DETAIL, FEDERAL RESERVE BOARD BUILDING, WASHINGTON, 1937

PAUL P. CRET
MASTER OF DESIGN

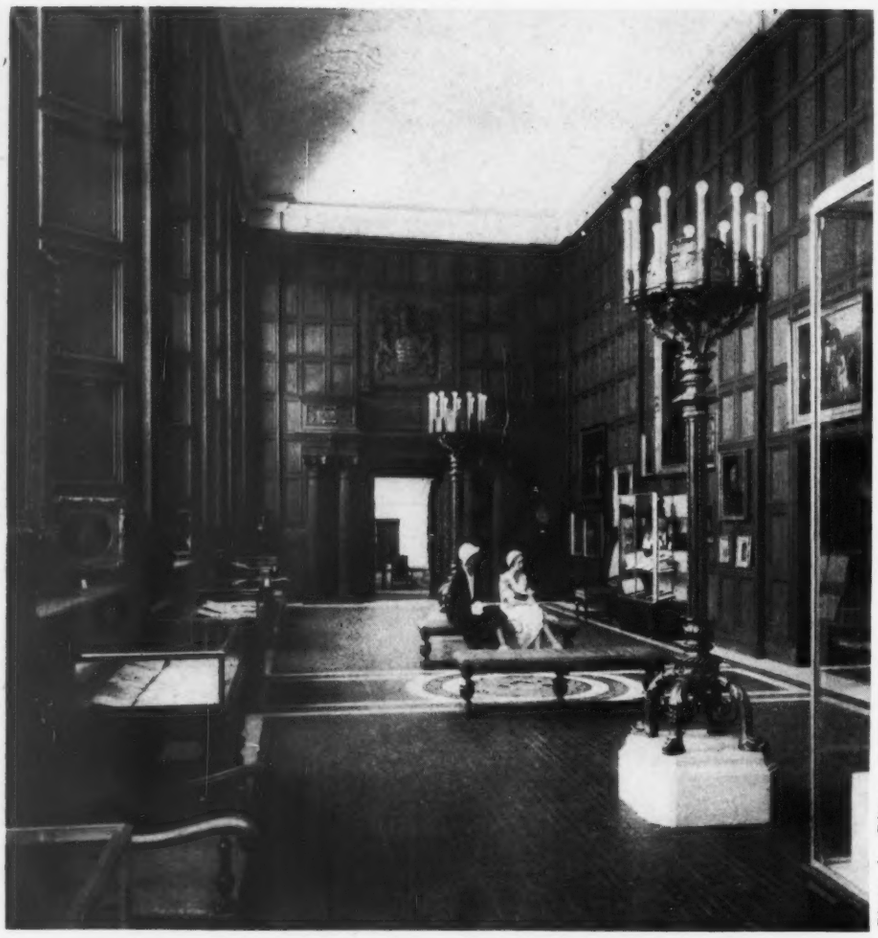
Photos by Rittase

The Staff Dining Room in the Federal Reserve Board Building and a view of the stair well. Every detail of the building is beautifully studied

Rittase

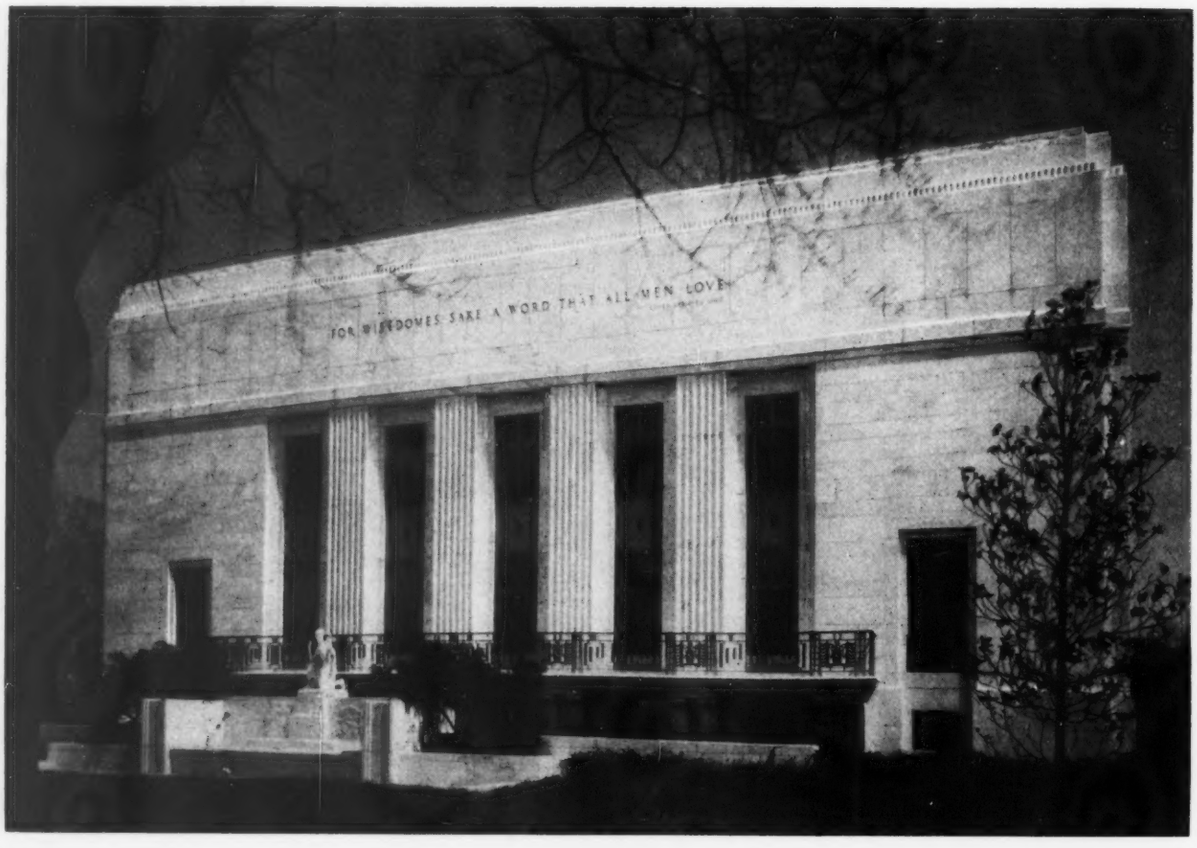
625 DOORWAY, CONFERENCE ROOM, FEDERAL RESERVE BOARD BUILDING, WASHINGTON

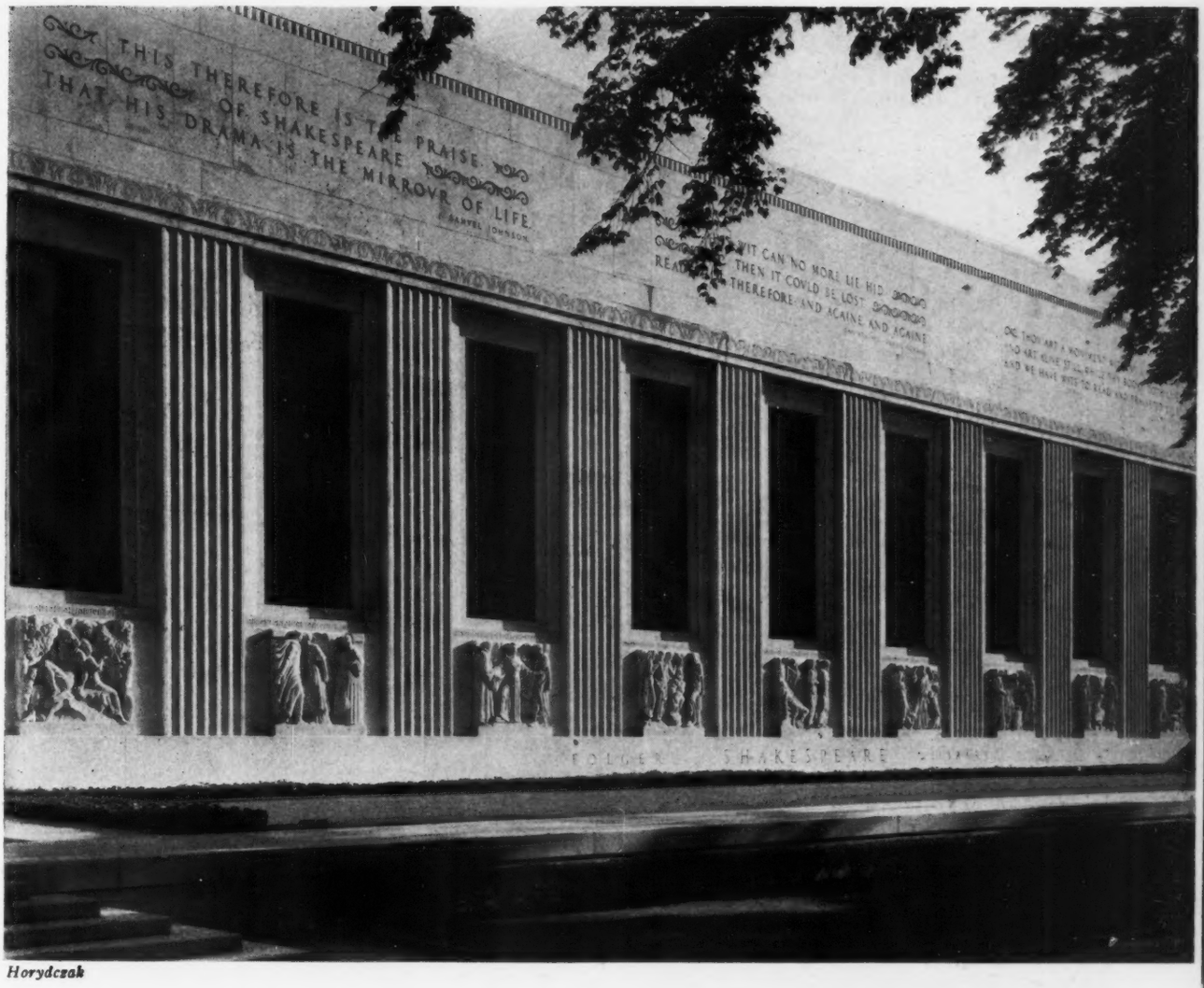
PAUL P. CRET
MASTER OF DESIGN



Photos by Rittase

No presentation of Cret's work would be completely representative if it left out the familiar but ever lovely Folger Shakespeare Library for which he was the Architect with Alexander Trowbridge acting as Consulting Architect. To the left is seen the Exhibition Hall and, below, the façade on Second Street

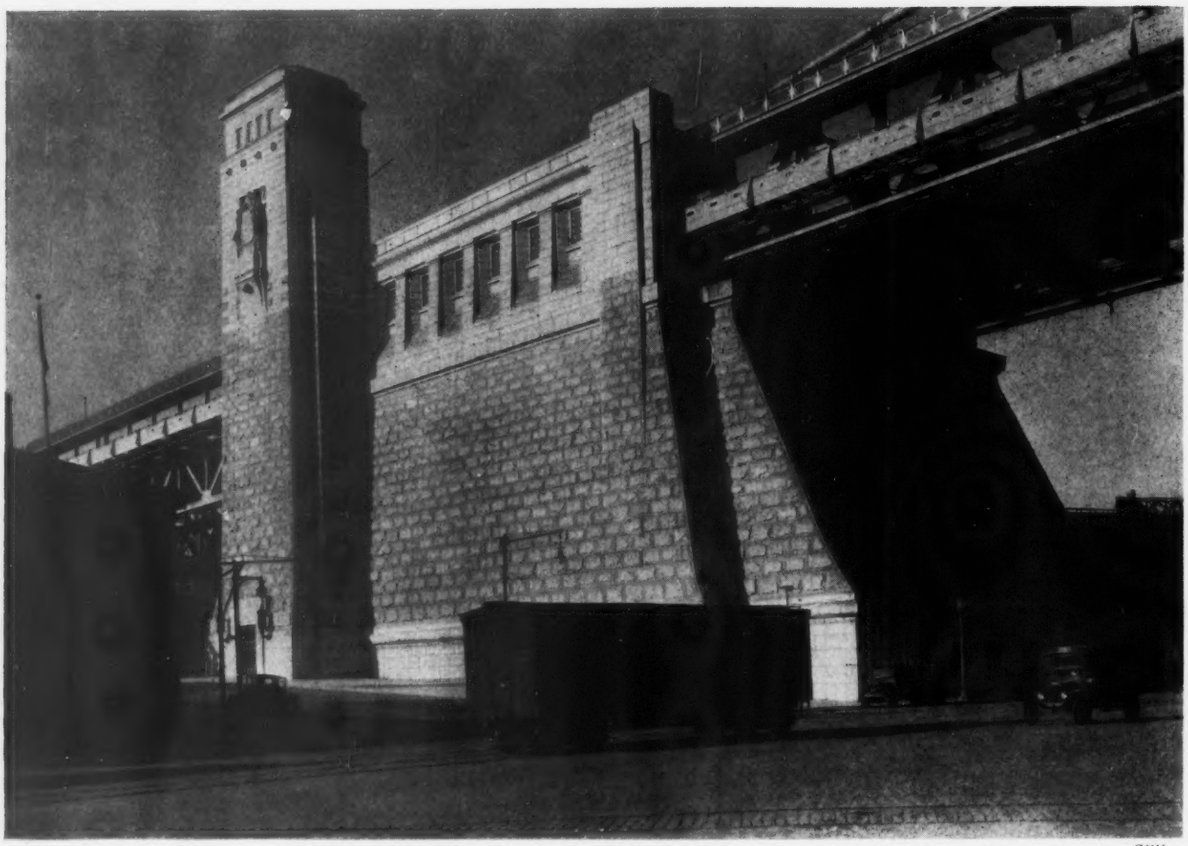



THIS THEREFORE IS THE PRAISE
OF SHAKESPEARE
THAT HIS DRAMA IS THE MIRROVR OF LIFE
BENJAMIN JOHNSON
IT CAN NO MORE LIE HID
THEN IT COVLD BE LOST
THEREFORE AND AGAINE AND AGAINE
FOLGER SHAKESPEARE

Horydczak

Ritzau

The Capitol Street side of the Folger Library is no less exquisite in proportions and detail. Since it was built, in 1930, this building has grown in public esteem and is generally held to be one of the finest pieces of design in Washington. The Great Hall of the Library is shown at the right



Gillies

The Anchorage of the Delaware River Bridge (1921-26) at Philadelphia and a view of the Klingle Valley Bridge in Washington, built in 1931

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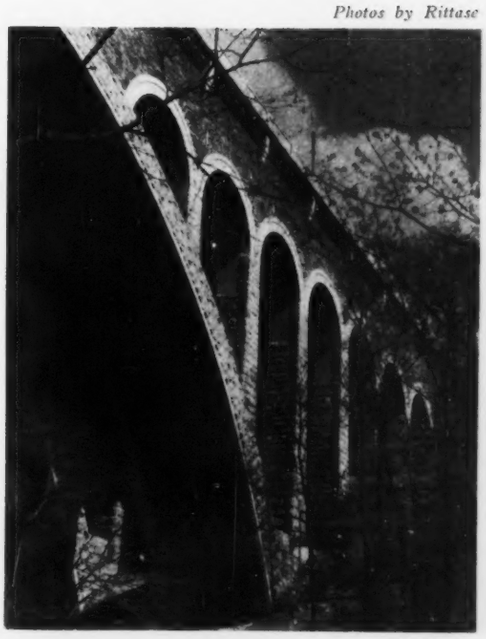
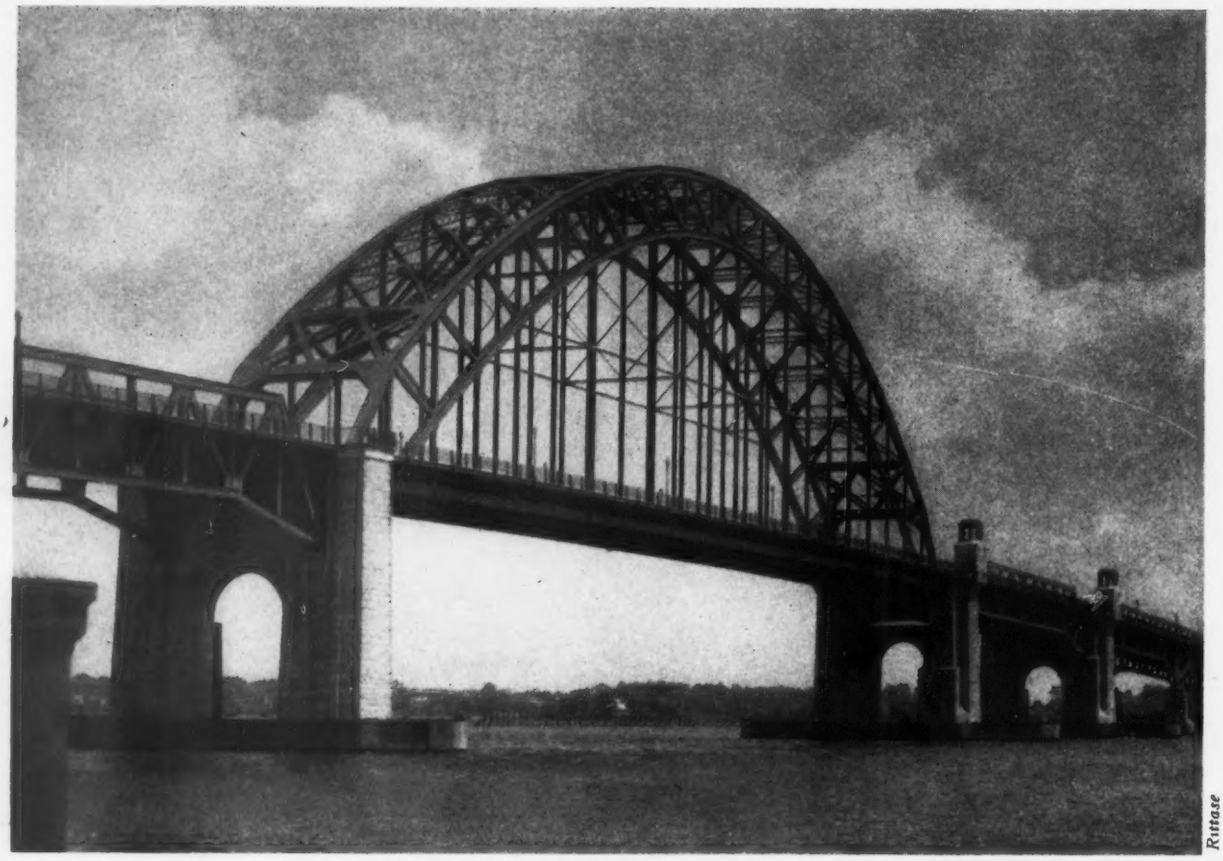
Photos by Rittase



The Henry Avenue Bridge in Philadelphia, gracefully spanning Wissahickon Creek, was built in 1930. Cret was the Architect and Modjeski, Masters, and Chase were the Engineers. The main arch ring is of warm gray Pennsylvania sandstone with a cool gray Chestnut Hill stone above up to the road level. The parapet is of Indiana limestone. The whole effect is harmonious



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Cret was Architect for the Tacony-Palmyra Bridge, Philadelphia (1929), and the Market St. Bridge, Harrisburg (1925)

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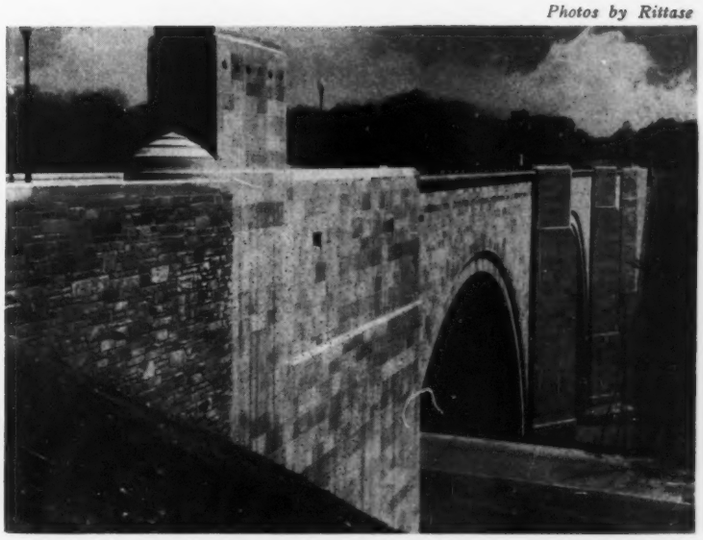
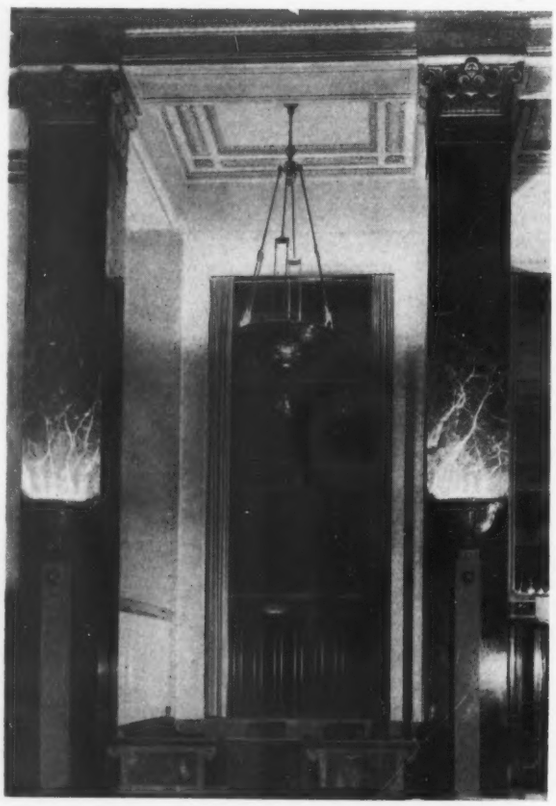
Photos by Rittase

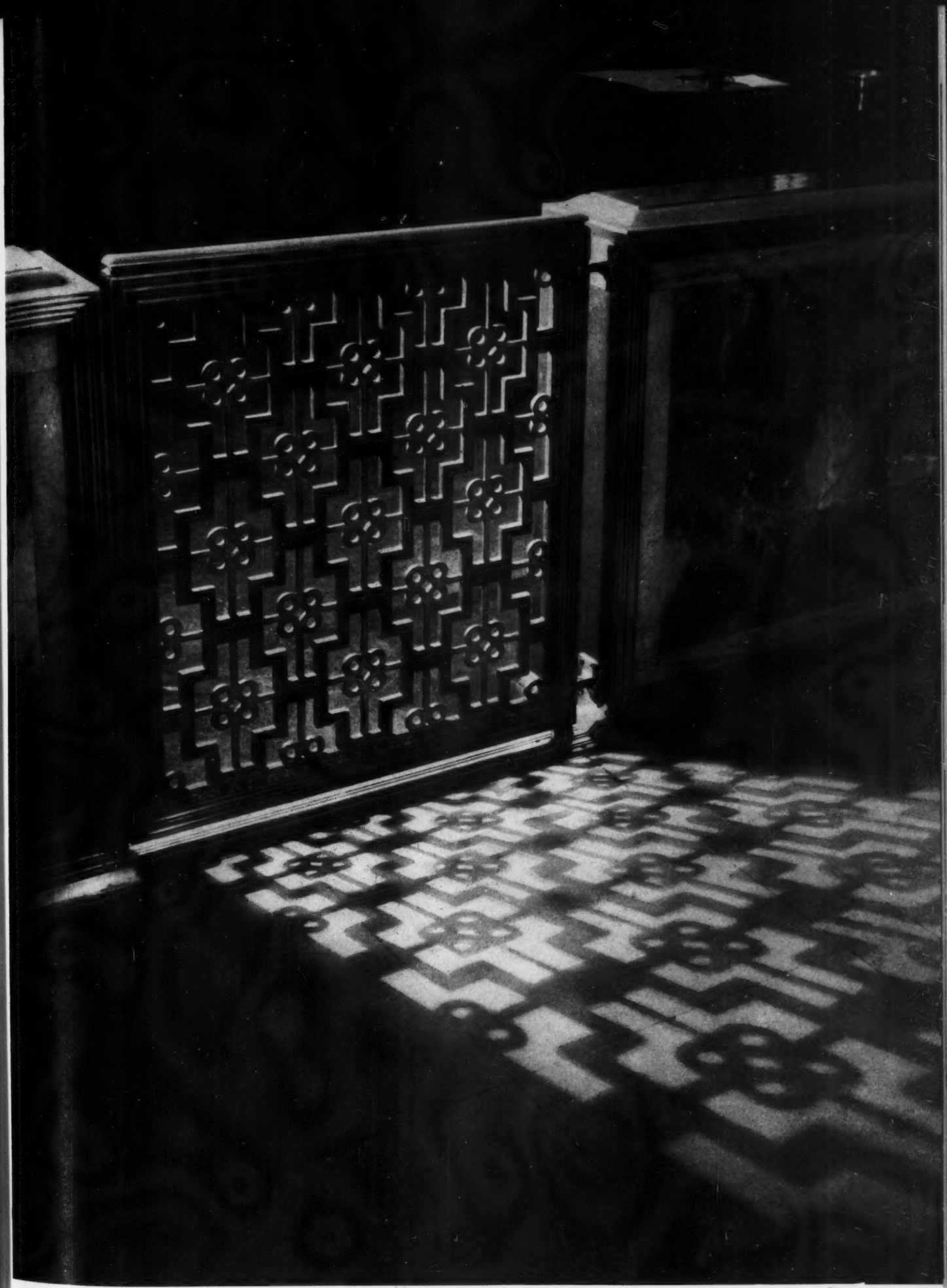


One of Cret's most satisfying bridge designs was done to carry Washington's Calvert Street over Rock Creek Parkway. Modjeski, Masters, and Case were the Engineers in this instance—the date, 1933. The two bridges opposite were by Modjeski, Masters, & Chase

Photos by Rittase



In 1932, Cret did the Federal Reserve Bank in Philadelphia—a beautifully detailed job with just the right blending of quiet dignity and opulence to fit the institution. The finely sculptured panels by the sculptor, A. Bottiau, and the splendidly executed ornamental gate shown opposite are typical of the quality of craftsmanship found throughout all work from Cret's office



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633 DETAIL OF BRONZE GATE, FEDERAL RESERVE BANK, PHILADELPHIA

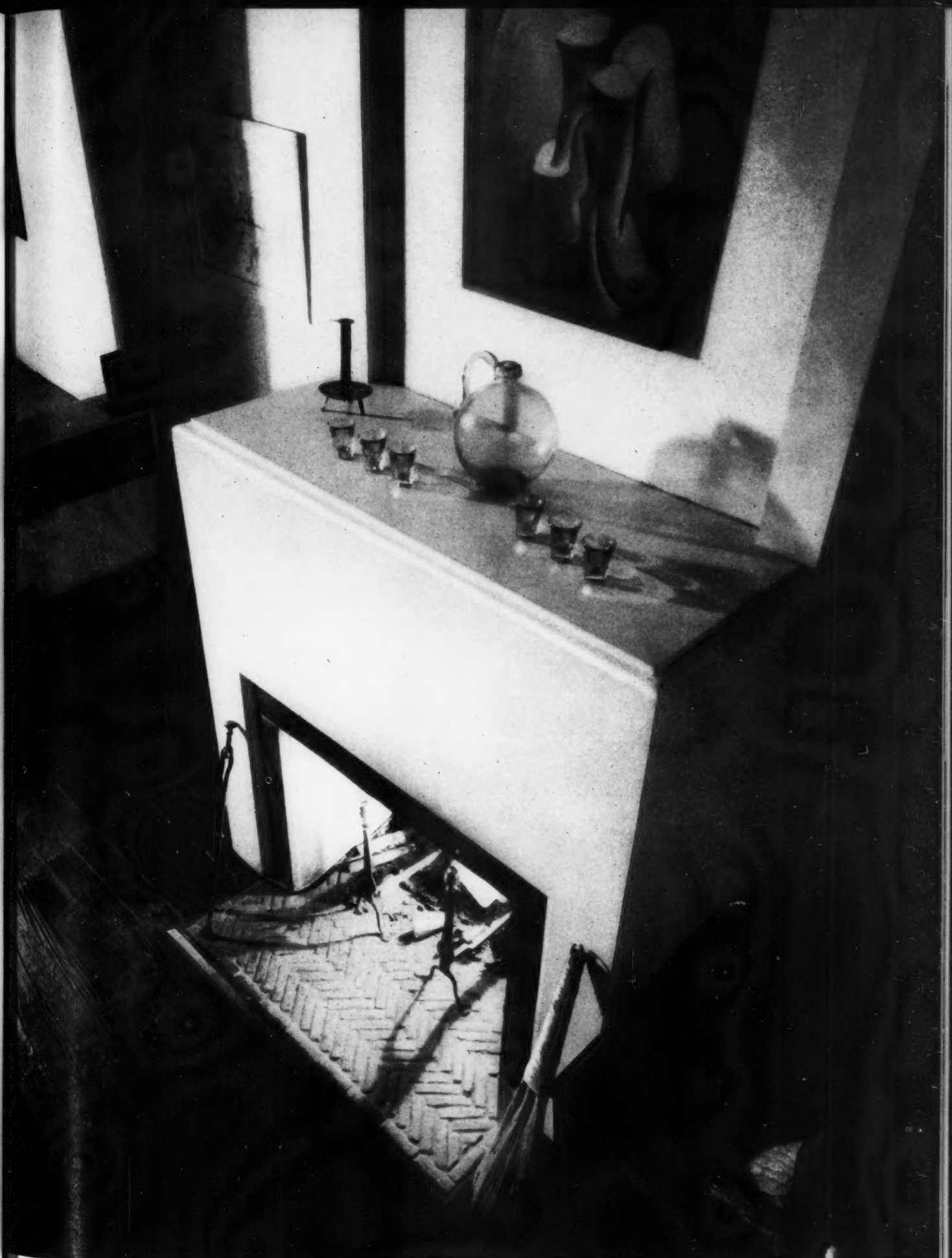
PAUL P. CRET
MASTER OF DESIGN

Wallace

Cret's residence work is not widely known though he has done a number of noteworthy houses. Among them is the Clarence H. Geist house at Villanova, Pa. (above) and houses for T. C. Shaeffer at Haverford and Vance C. McCormick near Harrisburg (left and right below). An interesting departure from the conventional is a remodeled studio for the artist, Earl Horter, which was done in the contemporary modern manner

Rittase

McFarland



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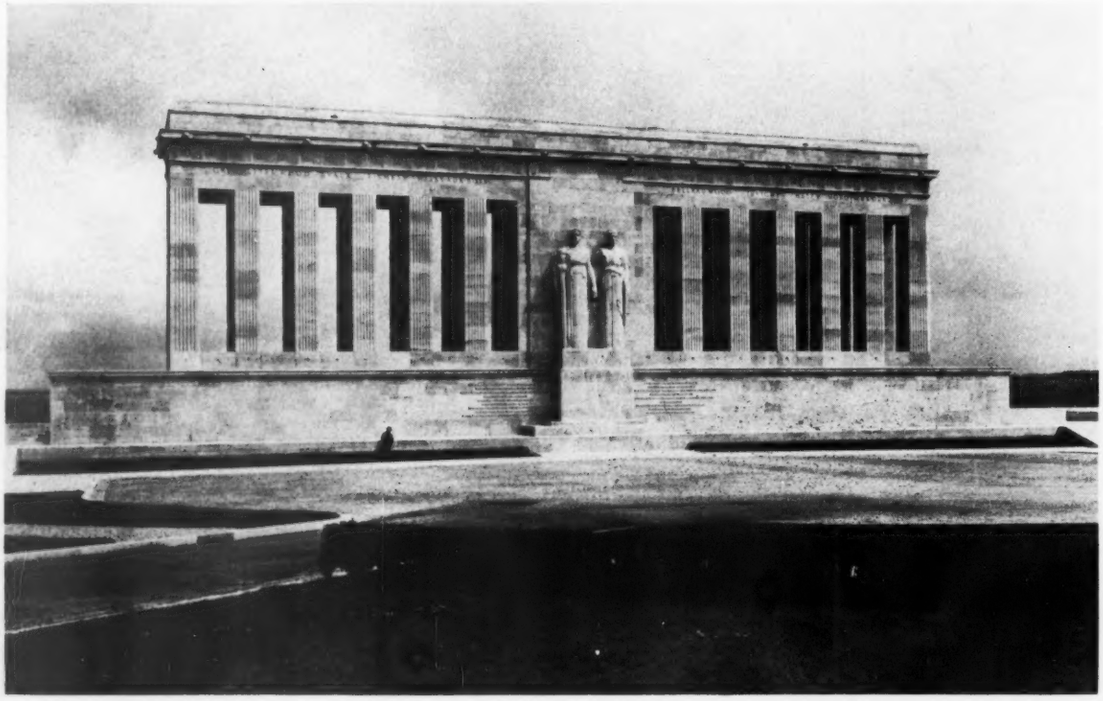
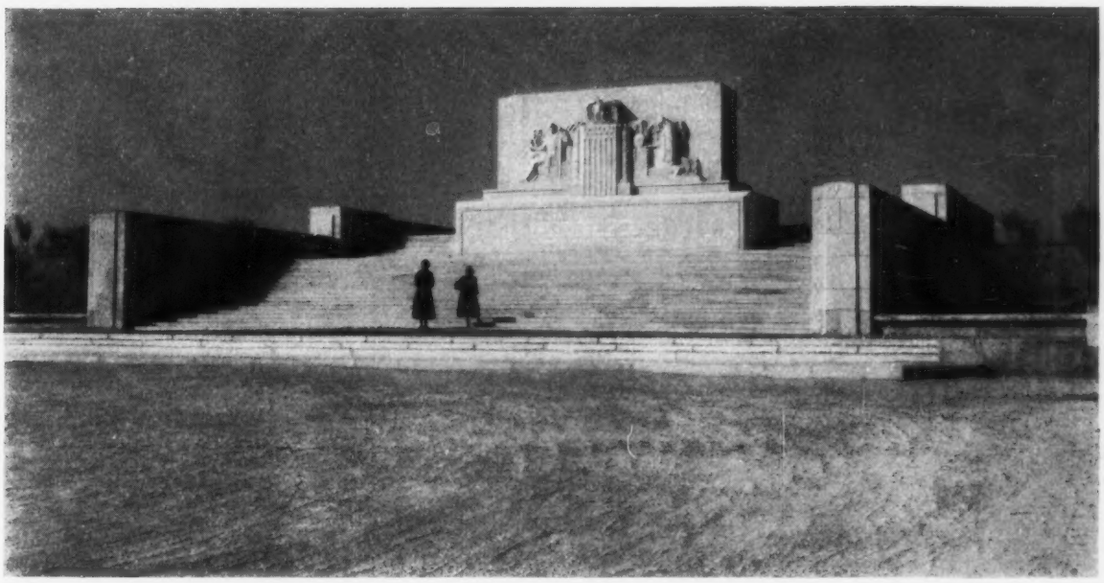
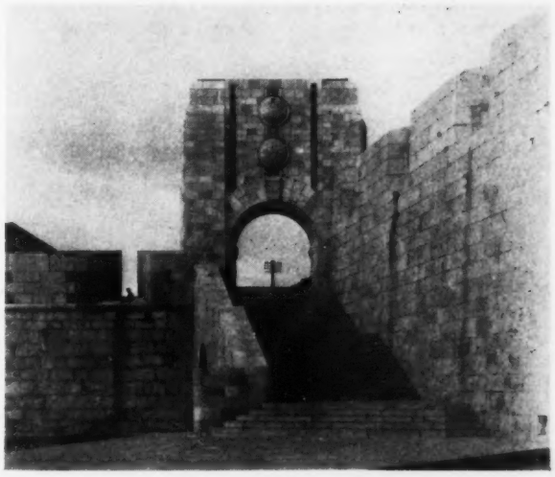
635 MANTEL DETAIL IN EARL HORTER'S STUDIO, PHILADELPHIA

PAUL P. CRET
MASTER OF DESIGN

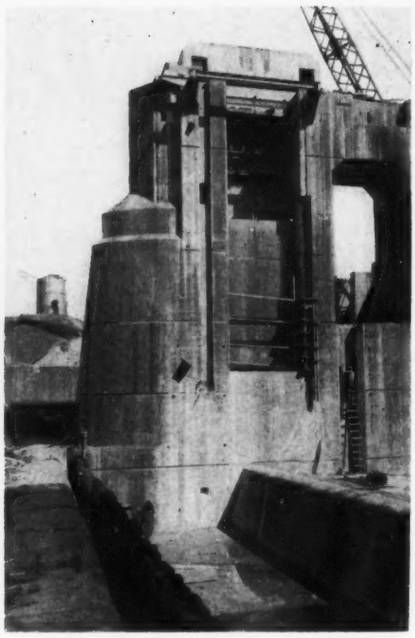
The Pennsylvania Battle Monument at Varennes, France, the United States Cemetery and Chapel at Waereghem, Belgium, and the American Memorial at Chateau Thierry are shown in order on this page, top to bottom



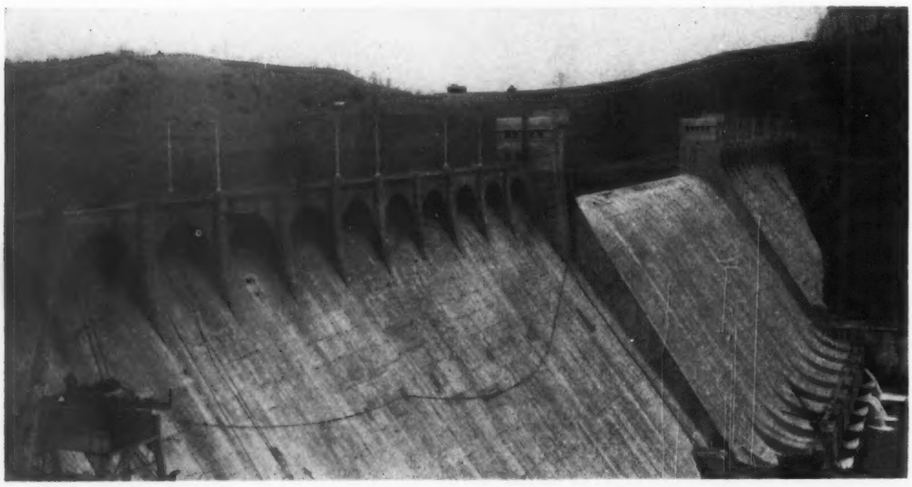


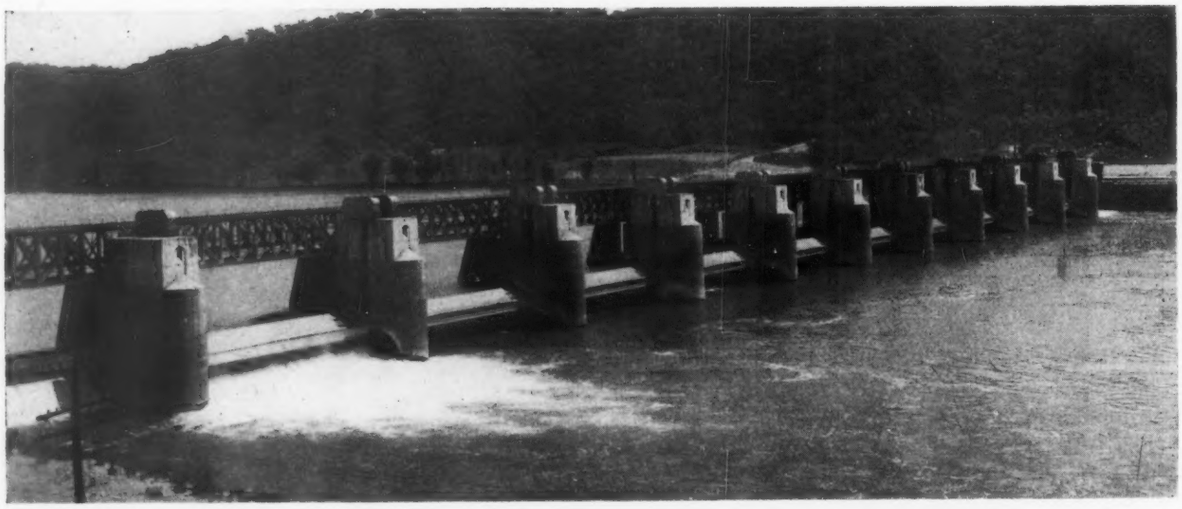


The American Battle Monument at Bellicourt, the American War Memorial at Gibraltar, and the Peace Memorial recently completed at Gettysburg are all distinguished examples of Cret's sense of fitness and simple dignity. He has been Consulting Architect to the American Battle Monuments Commission since 1925. T. H. Atherton was associated with Mr. Cret on the Varennes Monument. Lee Lawrie was the Sculptor for the Gettysburg Memorial and A. Bottiau for Chateau Thierry and Bellicourt



The architect can contribute something to the appearance of such engineering structures as dams and Mr. Cret's touch is applied here with excellent effect as consultant for the United States Army Engineer Office at Pittsburgh. The Emsworth Dam for the Ohio River (above and at right), the Tygart River Reservoir Dam at Grafton, West Virginia, and the Montgomery Dam on the Ohio are examples of ameliorated functionalism





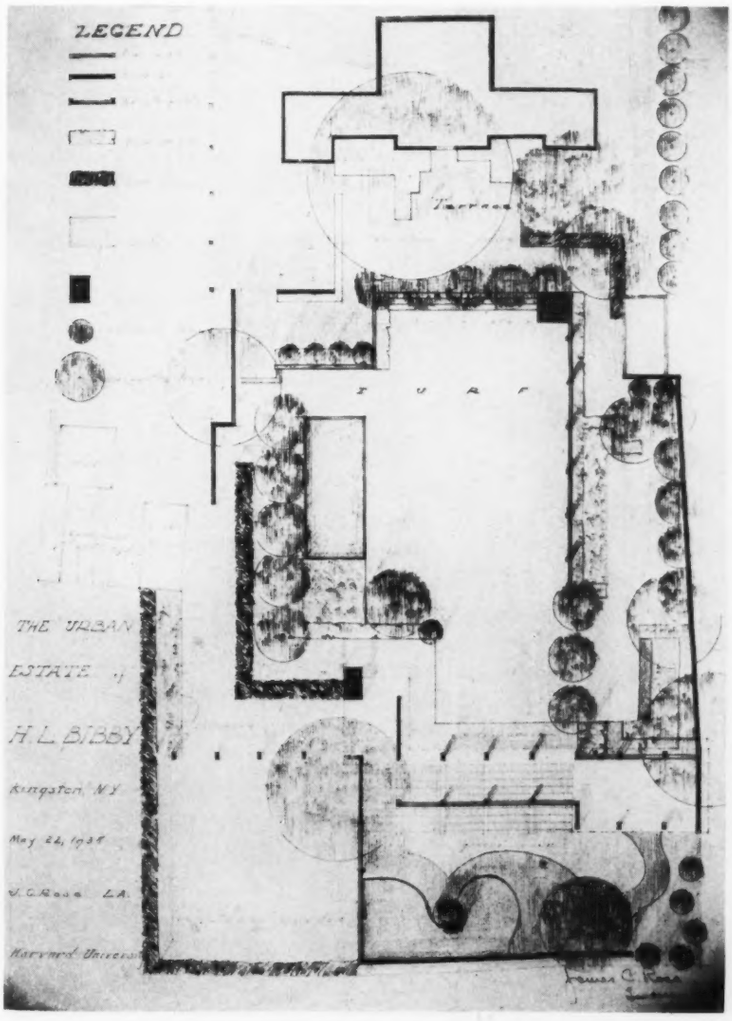
FREEDOM IN THE GARDEN

A CONTEMPORARY APPROACH IN LANDSCAPE DESIGN

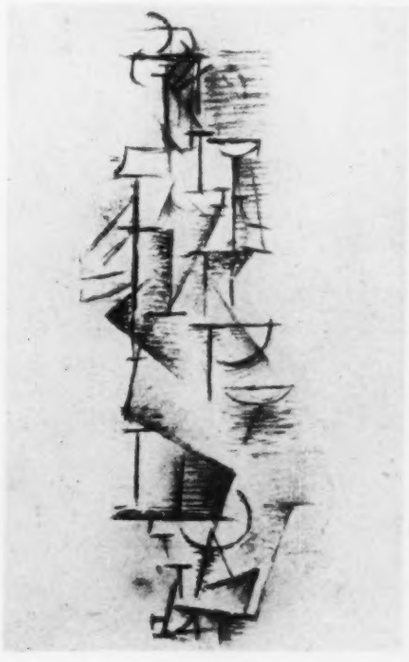
BY JAMES C. ROSE

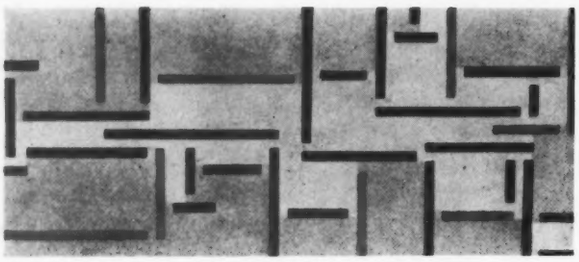
LANDSCAPE design falls somewhere between architecture and sculpture. Relieved of most structural and use requirements in the architectural sense, it is less purely æsthetic than sculpture because of circulation requirements. In reality, it is outdoor sculpture, not to be looked at as an object, but designed to surround us in a pleasant sense of space relations. It differs from both architecture and sculpture in several important respects:

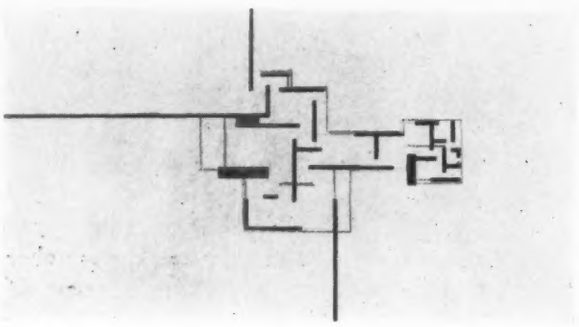
1. Materials, for the most part, are living and growing.
2. Horizontal dimension is usually much greater in relation to the vertical, a fact that increases the difficulty in getting a sense of volume and third dimension.
3. Scale, determined by the sky and surrounding country, is necessarily larger.
4. A sense of form is more difficult to achieve because of the looseness and instability



Aesthetic division of space imparts distinction to the garden plan, at left, by the author, who seeks to preserve in materials abstract relations such as those expressed in Picasso's "Figure," below, reproduced from "Cubism and Abstract Art" by courtesy of the Museum of Modern Art, New York City







Recognizable continuity of the contemporary style, from pattern to architecture to landscape, is exemplified in two more illustrations from "Cubism and Abstract Art," reproduced through courtesy of the Museum of Modern Art. They are "Russian Dance" by Doesburg, top, and a house plan by Architect Miës van der Rohe

of growing material used in garden design.

In building or sculpture, shape, height, and scale are determined once and for all by non-changing elements. The variables in landscape—sky, topography, and materials—make it a subtle art, and worthy of specialized study.

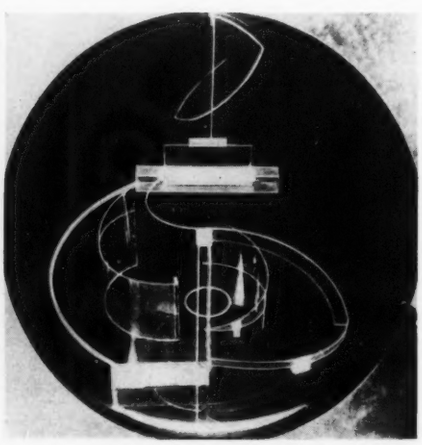
II

We are told that industrial design and "so-called" modern architecture came about through the discovery of new materials and methods of construction, but that landscape design cannot change because materials and methods have not changed. We have found our final resting place. Our grave is on axis in a Beaux Arts cemetery. A monument terminates the vista, and if you approach with reverence, you can see the bromitaph authority has placed there: "A tree is a tree, and always will be a tree; therefore we can have no modern landscape design."

Painting has had no noticeable change in materials, yet how a Beaux Artist must scratch his head when he compares Picasso with Leonardo.

Sculpture seems to have undergone at least a minor revolution if you compare Brancusi and Cellini, although similar materials have been at the disposal of both.

Music achieves the most startling renovation of modern times, yet the same nine notes used by Bach are used by Stravinsky. Let us not consider what might have happened to



Arrangement without rigidity is characteristic of both the garden designed by Rose, photographed at left from the terrace of a model, and Gabo's "Construction Spherique" reproduced from "Modern Plastic Art," by courtesy of Dr. H. Girsberger, Zürich

The rhythm of trees and free-standing piers recalls Stone Henge, reproduced above from "The Circle," by courtesy by Dr. Walter Gropius, and "Les Peupliers" from "On Drawing and Painting Trees" by Adrian Hill, by courtesy of the Pitman Publishing Corporation

landscape design if it had been limited to nine elements as constant as a note in music.

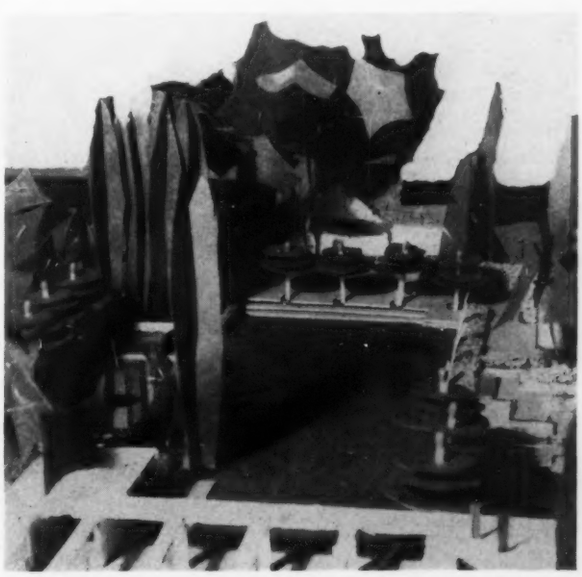
Perhaps the dance is the best single example of change in expression without change in material. The *Ballet Russe* quite obviously differs from the Greek chorus or the toe dancing of the '90's, and the human body is the only important element ever used by dancers. That must be as steadfast as a tree.

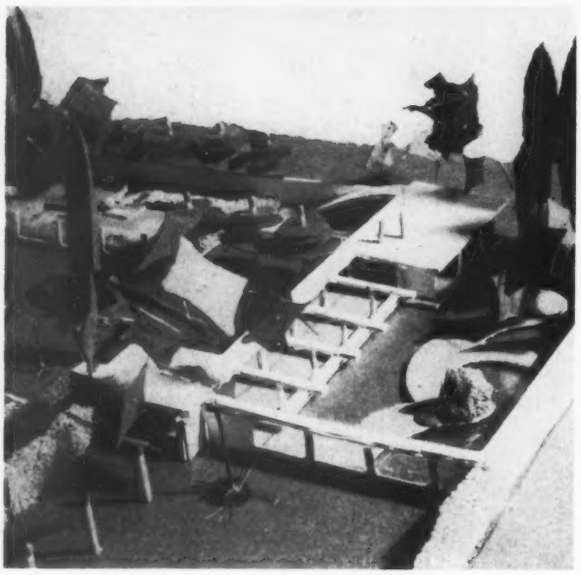
III

These changes in approach—and we can trace them everywhere from industrial design to poetry—have evolved whether or not the development of materials or methods applied directly to them. They are not changes in degree; they are not the attempt of the new generation to be different. We are told that the principles of the Renaissance are the A, B, C of design, and that we must learn the alphabet before we may talk in good company. Another beautiful bromide — but, unfortunately, to learn the Renaissance alphabet in design has about the same value as to learn the Greek alphabet if we wish to speak English. No question but that it is a scholarly thing to do, and has an historical interest; but just as we cannot assume that a professor of Greek could write a better play than Noel Coward, we cannot assume that a foundation of classic design will better equip us to do modern.

Contemporary design represents a change in kind, a change in conception, the expression of a new mentality we have derived from the effects of the industrial and economic revolutions. These revolutions have the significance for our civilization that the discoveries of Gallileo, Copernicus, and Magellan had for the Renaissance. They have put a transparent but impenetrable screen between us and the past, and we find ourselves in a new mental atmosphere. We can appreciate Gothic cathedrals and Renaissance palaces, but we can no longer produce them because we have been cut off from their source of inspiration. History has no value for us unless we learn this first. The only direct stimulus we can get from the past is an understanding of how the social and psychological influences led a particular

The author's garden model below shows how a composition of tree forms is combined with water and architecture, achieving informality without loss of form





Reflections in the pool, top, and perspectives from the summer house, at once a structure for vines and for shelter, were all carefully studied from every viewpoint

civilization to arrive at its peculiar expressions. We should do the same for our own civilization and seek to express it.

IV

Style evolves naturally from the subjective influences of the social order in which we live; fashion is the superficial manipulation of any style to produce variations that have momentary appeal. To determine the essential elements of the contemporary style, we can do no better than turn to the abstractionists. They are the great experimenters in art as Einstein and Millikan are in science. Their work is invaluable. Dissociated from context, we can see the new mentality in the raw.

The constructivists probably have the most to offer landscape design because their work deals with space relations in volume. The sense of transparency, and of visibility broken by a succession of planes, as found in their constructions, if translated into terms of outdoor material, would be an approach sufficient in itself to free us from the limitation imposed by the axial system. If you wish to consider any line of sight an axis, then you have an infinite number of axes in a garden or anywhere else, and so it should be. By selecting one or two axes and developing a picture from a given station point, we are losing an infinity of opportunities. The axial approach merely harks back to the elegant façade and two-dimensional design of the sixteenth century. Such elegance fitted the society of Louis XIV, but has no relation to our own. We no longer design buildings like Mansard. Why should we design gardens or even world fairs like Le Nôtre? No one would think of furnishing a room on the principle of the axis. You do not expect to stand at one end and find an æsthetic composition at the other. You want a sense of proper division and interest from any point. So with gardens: it is fundamentally wrong to begin with axes or shapes in plan; ground forms evolve from a division of space.

V

The Beaux Arts system—and it seems incredible that practically every landscape school in the country is bound by it—has an amazing scorn for plants. They seem to be totally dissociated from design, and a knowledge of them a matter of indifference. Plants, rock, earth, and water are the major materials of landscape; to ignore any one of them limits the possibilities. Now they are stuck in a "design" at the last minute to provide enclosure or frame a "picture," but they are seldom used for their own sake. From Brancusi we can learn the importance of qualities inherent in a material; material gives the quality to a design. Warmth, charm, and intimacy come from materials. The popular belief that the contemporary style is necessarily cold and impersonal betrays an ignorance of the style and scant feeling for the use of materials. We can use anything from adobe brick to concrete and steel, and can therefore expect all the attributes of former styles in addition to the freedom that comes with self-expression.

Plants are to the landscape designer what words are to the conversationalist. Anyone can use words. Anyone can use plants; but the fastidious will make them sparkle with aptness. At Versailles, one finds hedges and trees clipped to fit the design. The whole scheme represents that point of view which we have discarded. It belongs to the period that crowded rooms into an H-shaped plan. The

contemporary landscape would require the honest use of materials and the expression of their inherent qualities.

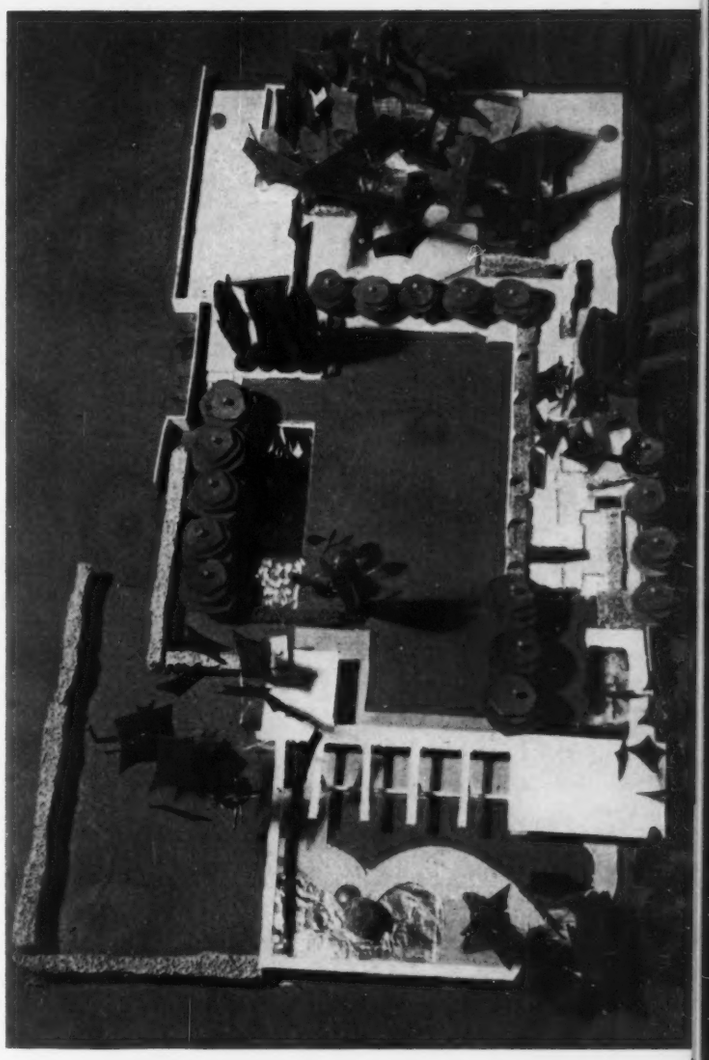
VI

The romantic period attempted to correct the fallacy of imposed academic principles, but failed in the graphic arts because its roots were in literature and sentiment rather than form and arrangement. This single failure has been the constant war cry of the classicists against any departure from their conviction of the absolute. The informal movement, essentially destructive, offered no satisfactory alternative to the order it replaced. Informal came to mean "formless" and proved as incompatible with the evolutionary state of man as the "back to nature" philosophy of Rousseau.

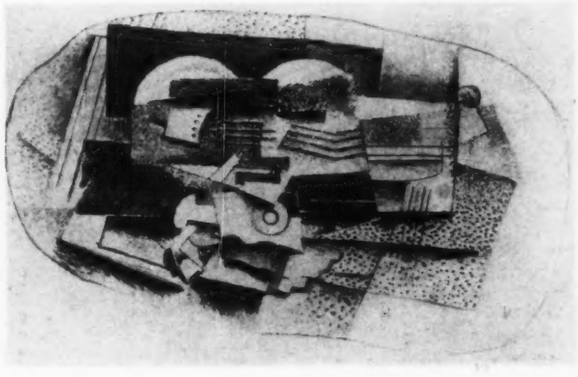
Anything that has not the quality of form is amorphous and meaningless. When man arranges nature or nature arrives at an arrangement perceptible to man, the thing acquires form and meaning. The arrangement may be pleasing or ugly, it may be loose or stiff, it may be symmetrical or unsymmetrical, but if the arrangement is perceptible, it possesses the quality of form, and to that extent is "formal."" Informality does not exist for us except as an effect coming from the looseness and freedom in the use of form; the "leave nature alone" attitude is complete childish romanticism, and, more important, an impossibility.

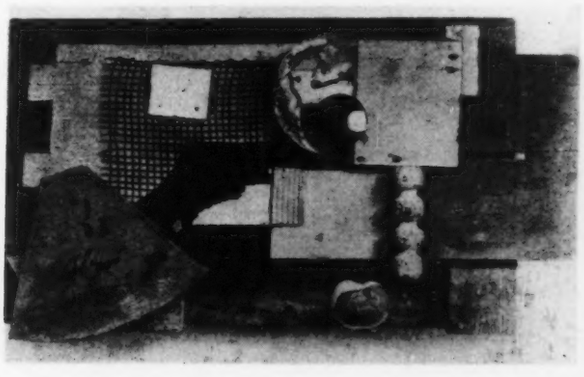
Conclusion

No absolute exists in design any more than it does in nature. It is human, perhaps, to cling to a life line, but we only do so when we are afraid. Landscape schools from New York to California cling to the Beaux Arts system, and fight because their existence is threatened. Words are of no use. Fear dissolves the intelligence and blocks the vision. These conventional instructors not only look where we look and do not see what we see, but they say what we say and do not mean what we mean.



Ground forms, evolving from the division of the garden space, and the dominant lines appear in this view of the garden model. Interesting suggestions for gardens are seen in Braque's "Music," at left below, and Schwitters' "Rubbish Construction," reproduced from "Cubism and Abstract Art" by courtesy of the Museum of Modern Art, Rockefeller Plaza, New York

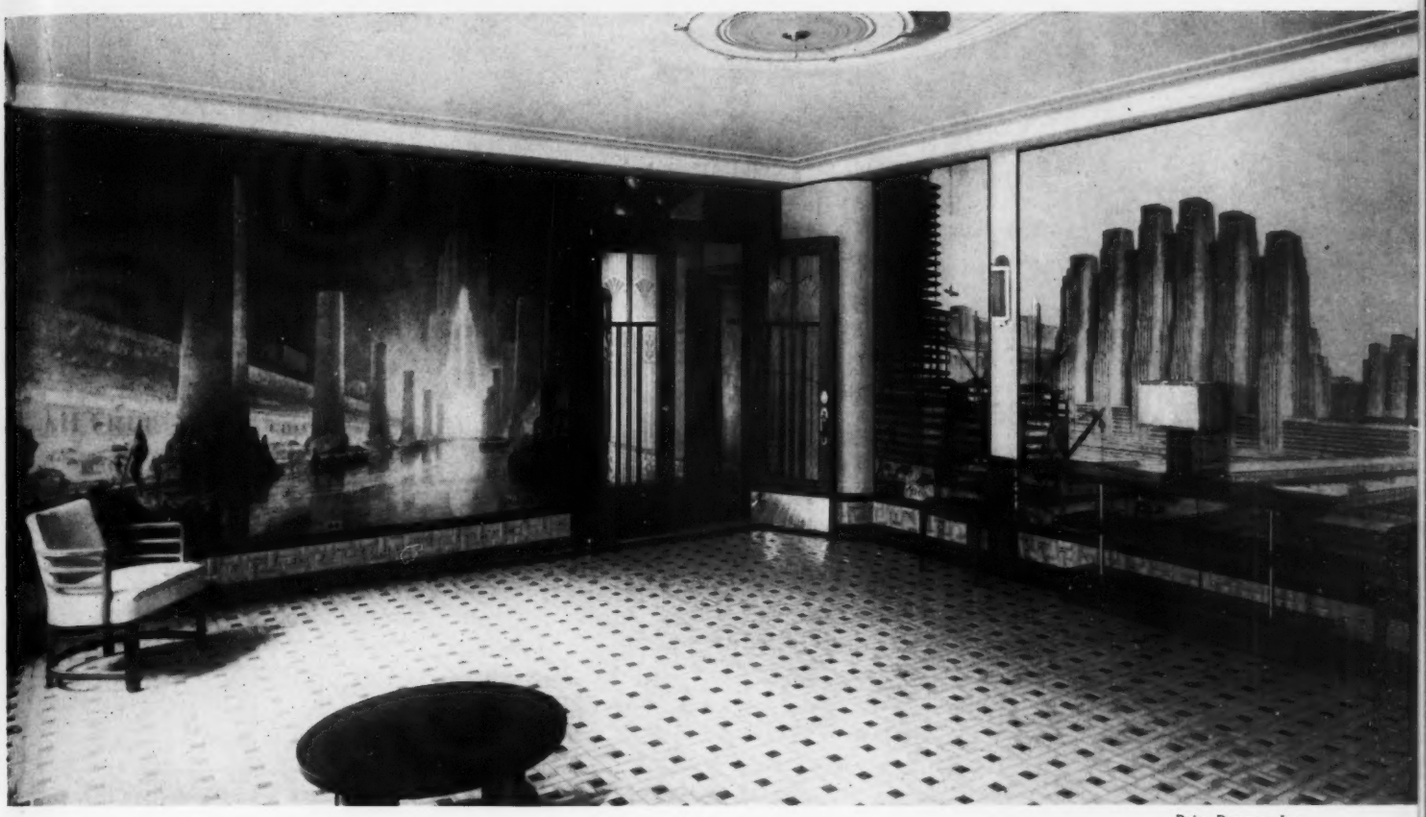




Drix Duryea, Inc.

Four themes have been effectively handled by Drix Duryea, Inc., in the large Photo Murals used in decoration of the four entrance foyers of The Chelsea Gardens Apartments in New York City, for which J. M. Felson was the architect. Old prints of the city and views of mountain peaks were photographed for these

Drix Duryea, Inc.



Drix Duryea, Inc.

The imaginative and prophetic drawings of Hugh Ferriss, whose studies for Cities of Tomorrow have advanced a Futuristic Style, were photographed for the walls of a third foyer in The Chelsea Gardens Apartments, while pictures of New York structures of Today adorn the fourth, not shown. Ceilings are 9 feet high

Drix Duryea, Inc.

THE FALSITY OF AXIOMS

BY ALLEN W. JACKSON

AN AXIOM is said by the dictionary to be "A self-evident truth," "A proposition whose truth is so evident that no demonstration can make it plainer"; and in our callow youth we have all assented because of the plausibility of the examples put before us. Our geometry books—where axioms most abound—said, "A straight line is the shortest distance between two points," and, "The whole is greater than any of its parts," etc. These seemed reasonable to the dullest of us and we were encouraged to find that geometry (that big word) was not going to be so bad after all.

With arithmetic, the same. The most truculent radical in the class found nothing to object to in, "Two and two makes four." It was all much easier than we had expected.

Leaving the axioms of mathematics, we came to the humanities and their aphorisms. These, in turn, were undisturbing and we were willing again to concede them a certain plausibility. The Golden Rule probably had a case, and such a Sunday School maxim as, "Honesty is the best policy," was not without its secret supporters.

Perhaps these moral maxims did not have quite the same gilt-edged rating with us as the old one about the straight line and the two points. These had a flabby quality lacking the bite of, "The whole is greater than any of its parts," and it did not occur to us until much later that the reason was, they were treating of human affairs where logic was no longer admissable. We had left the logic of Euclid for the unpredictable reactions of life. At any rate, we found ourselves provided with a lot of ready-made slogans to guide our footsteps along the paths of science and morality. It was only later that we were surprised to find that both the scientists and humanists had a tendency to extend their authority into the arts.

One would suppose that the arts occupied a wide enough field and were of sufficient singularity to need a special body of laws of their own. But no! Enthusiasts in science and ethics and, for that matter, literature, have always been quite sure that their particular formulas will also fit and govern the arts nicely.

Now, without going into the troublesome question of "what is art," we may at least agree that the history of art is, in its essence, the history of man's culture, and that the artistic expression of any period has always been a very accurate mirror of the contemporary state of that civilization, if not indeed a prophetic finger pointing the direction in which it is moving. A people's past influences the artistic output of the present which in turn reflects the contemporary social forces. If the artistic output is feeble, groping, and without conviction, it is not less but more expressive of the time. But, just as it would be without significance for an artist to revert to a period not his own, so it would be fatuous for him to allow himself to be guided in his work by canons made for the guidance of science, ethics, or literature. It is this latter confusion that causes so much misunderstanding in the artistic world.

There are those who, forgetting that they are not in the pulpit, talk about truth and falsehood in discussing pure design, thus mixing art and morals. "Bad morals make bad art" was a simple equation put out by Ruskin—and thus they thrust upon art, an innocent bystander, the *odium theologicum*.

We all know there is no use arguing about taste. Yet there are those of a critical turn who cannot forbear laying down rules regarding it. Moral judgments assume an aesthetic validity and the puritan critic does not hesitate to instruct the architect in his work and the artist at his easel. He informs the architect that in his work truth alone is admissable, that form follows function, that there shall be no sham, etc. He informs the painter as to his subject, how it should be treated, and finally pronounces it good or bad on a summing up of moral values. As for his architectural virtues, the whole history of architecture from the Egyptian temples to the New York Fair has thrived on sham and pretense and "form" has too often been quite willful about following "function."

Another artistic axiom supplied gratui-

tously by these ethical critics is, "Architecture is good construction truthfully expressed." Now, no doubt good construction is the highest virtue to the specification writer and is certainly expected by the building committee, but unfortunately it is not always found as a part of good architecture. If it were engineering we were talking about, "good construction" would indeed be necessary: it would, in fact, almost constitute engineering—but not architecture.

Indeed, it is a question if the best Gothic architecture of the 13th century as exemplified in the great cathedrals can be called good construction. In spite of the extraordinary cleverness in pushing to its extreme limits the balancing of the dynamic forces of thrust and counter-thrust necessary to hold the stone vaulting in place, the results were certainly questionable as to their being good construction. A ceiling that requires such an elaborate *tour de force* as a series of exterior props—the flying buttresses—to keep it from collapsing would seem to be exceeding the proper limits of its material. One may be too clever. These builders were indeed fortunate—and it was only a happy chance—to have at their disposal all the arts and crafts in their fullest flower, ready to enrich and overlay their extraordinary skeleton. The happy result of their union was a glorious architecture.

The same question may be raised against the classic work, notably in the case of the Doric order with its great supporting columns far in excess of any structural demand.

And we should not fail to note, in passing, the necessary aesthetic requirements of great architecture which may actually conflict with the exact needs of good construction. These may even call for bad construction in the sense that over-strength is as much an engineering fault as under-strength. So the fulfilment of proper engineering requirements for exact strength may give less bulk than required for aesthetic satisfaction. If economy of means is stretched here to please the eye, if form exaggerates function, it may be "poor construction" but no sin against architectonics. A support shall not only be strong enough for the work it is called upon to do, but it must *look* strong enough. That is why it is so unpleasant to see a granite building supported on a sheet of plate glass. A big mass calls for a big support. Perhaps the world will sometime become so used to steel construction that it will learn to evaluate the slender steel shaft in terms of the old stone pillar and the aesthetic sense will be completely satisfied. Today we have not come so far and the sin of fattening the steel column with lath and plaster should be forgiven if the beholder is otherwise troubled. As old Henry Wotton said, "delight" is one of the conditions of worthy architecture, perhaps the chief condition, and must be had, whatever the price. Our modern young architect, with his "machine for living" of glass and concrete, smiles with tolerance at this, as an old-fashioned notion perhaps; but is it not the real difference between architecture and engineering?

There is another bit of architectural guile, another bit of benevolent deception affecting good construction that might well trouble the moralists; namely, that of the refinements introduced into building by the Greeks and perhaps by the mediæval men in an attempt to correct certain optical illusions to the end that the effect on the spectator should be nearer what the architect intended.

The Renaissance men tried for the same thing in their use of false perspective, as in St. Peter's colonnade and, in more naïve fashion, in their painted gardens and architecture on the walls of their courtyards.

All this deception, if we choose to call it that, may be bad morals but is unquestionably an expression of the highest function of art in that here things are made slightly wrong that they may appear more convincingly right. This transmutation is the chiefest function of all art. It is the plus quality that the artist brings to fact. It is a fine example of the end justifying the means—but not of the axiom about truth in building. Honesty is not the best policy.

The utilitarians have another slight variant on "good construction means good architecture," a bolder claim in which their interest in sound work and no nonsense makes the further assertion that good construction alone means, *ipso facto,* beauty in the result. Of course if we follow this idea far enough we reach the logical conclusion—and patent absurdity—that we must finally award the palm to such things as printing presses, locomotives, and warehouses—things in which use only is thought of. This would be to say that there is no such thing as beauty in building, only utility; no designers, only engineers; no charm, only honesty. Ornament, color, and handsome material would be unknown, for good construction alone would never use marble, carving, or ornament.

As for trying to attach odium to sham and pretense in architecture, it will hardly stick. They have been freely indulged in at all times and in all styles without shame because the people, who are the final judges in such mat-

ters, do not object to either. In the light of history we may even say they like it.

It takes various forms but they follow a common pattern. In Egypt, the builders of the best period made the granite cornices of their temples in imitation of the dilapidated mud walls of simple huts. These walls were made of vertical reeds plastered with Nile mud. With time, the mud fell away and the reeds fell over, making a sort of great cavetto moulding. It was this ruined mud wall that the stone masons choose to copy in granite for their great buildings! What a failure in adaptability! What a lack of originality! What a superb result!

We have the Greeks' whole system of temple building imitating in stone all the several parts of the earlier wooden buildings, if not in marble then in stucco to imitate marble —a double sin. What a sham! What a paucity of ideas! What a triumph!

With the Romans, the same: the false use of structural members as applied decoration, the deceit in covering over their concrete with a veneer of marble. How vulgar! How shoddy! How splendid!

Again, in the Renaissance we have the great stone domes saved from collapsing, not by any such frank expedient as the Gothic men used, but by being bound by secret iron chains; and stone arches and vaults dependent on their iron tie rods to hold them in place.

The same everywhere. Witness St. Paul's in London with its lying façades and a result that all the world admires.

And the higgledy-piggledy English country houses, the most hopeless list of architectural sins and the most charming houses in the world. Their wilful unpremeditation a precursor of the struggle in our modern style for the casual and studied neglect of architectonics. But, unlike the modern work, it was never carefully capricious as in Germany, nor an intellectualizing of the picturesque as in the Baroque.

And to come nearer home in our search for transgressions against artistic integrity, what of the half-timber villas beloved of the bride and the speculative builder scattered over our suburbs? The artificial stone, the asbestos shingle, the make-believe brick, all combine to produce an imitation of rugged simplicity and picturesqueness.

None of these things troubles the public, in spite of the rules and regulations for good architecture worked out for them by the cognoscenti. And why should they, when the rules are unknown and the aberrations hidden. In any case they would not care a button about the whole matter. To the man in the street, ignorance is bliss and architecture is good if he likes it. Otherwise, otherwise.

Is it possible that the modern architect himself spends so much time mastering the rules and in being quite sure his work is correct that as a result it is nothing else? Does this account for the bitter jibe that there has been no good architecture since there have been architects?

Why should the modern men, for instance, be so slavish in their copying of the "Colonial" style? The builders were a lot of 18th century Yankee carpenters experimenting with Georgian work and whose chief virtue was that they were not at all interested in getting it "right."

But enough of the moralists and their preaching. There are also the scientists eager to aid art with their mechanical formulas for producing correct proportions in design by the use of logarithms and slide rules; forgetting in their turn that there is no common ground here, and that art and science are opposite facets of the human mind to be forever kept apart. For if they are allowed to encroach on each other the result is sure to be epicine and futile. When art is subjected to science it is stiffened and blighted, and when science allows art to take a hand it becomes flaccid and inept. Art, science, and morality can never be at ease in each other's company.

It is hard for the professors to remember that art is made for the people and not the people for art; that a picture is as good as it looks. "Looks" is all it was painted for and it has no more concern with right and wrong than a sunset. If the crowd insists, in spite of its instructions, in admiring the wrong picture, then it is the right picture. Pictures are not painted for the pedants but for the people who "know nothing about art but know what they like." The greatest pictures are those admired by the most people.

Aside from technical studio tricks, no artist is worth anything who bothers about rules. The real artist knows nothing is right, nothing is wrong—that art is a sort of ectoplasm thrown off by certain men as naturally as they sweat and with as little relation to any intellectual process. An artist is a poor emotional creature who, with a pencil in his hand and visions swarming through his brain, puts down what pleases him, careless of those who find fault and would set him right. As Maugham has said, "Beauty is an ecstasy; it is as simple as hunger. There is nothing to be said about it. It is like the perfume of a rose: you can smell it and that is all: that is why the criticism of

art . . . is tiresome," and he continues, "No one has ever been able to explain why the Doric temple at Pæstum is more beautiful than a glass of cold beer except by bringing in considerations that have nothing to do with beauty."

Why the learned in special fields of human thought should assume that their particular medicine is just as good for other troubles outside their purview is hard to understand. We had supposed it was only the quack who claimed his particular nostrum was "good for what's the matter with you!"

But the scientist cannot bear to have the artists so slip-shod and unenterprising as to go along without a good handy mechanical rule for transforming sterile desire into art in fact, a short cut, a rule of thumb. He cannot believe that it is like a plan for perpetual motion, lifting oneself by one's boot-straps, or any *ignis fatuus* that will lead to the promised land where one can get something for nothing. The old haphazard, lawless way of artistic production is a constant source of irritation to these men of figures. They are sure there is such a formula somewhere and that it is only a matter of discovering it. They have no patience or understanding of Sir Joshua Reynolds' remark that, "Art comes by a kind of felicity and not by rule."

As a result, they offer us a wealth of formulas so diverse that it is a question if they do not get in each other's way. Formulas as an aid to design of whirling squares, dynamic symmetry, the square root of figures that have none, the plane projection of fourth dimentional space, magic squares, the golden mean, the laws of crystals, phyllotaxis, Egyptian rope stretching, and other abracadabra.

We are told that the Parthenon plans and elevations are related to a square plus a root five triangle; and the demonstration really is astonishing. But when we apply the same formula to the next worthy building it doesn't fit. Perhaps, however, an analysis of this building shows that all the parts are related to each other and to the whole by a system of modules. It is impressive. But the third again proves intractable. And so, if each case is to be a special one, all these panaceas cannot be of much help to the befuddled student. It is too much like the bed of Procrustes. In all these mathematical rules for producing a beautiful façade, let us say, do its innumerable subdivisions, the character of its ornament, its fenestration count for nothing? Beauty can never be at the call of such a hash of algebra and geometry. Of course, one can see how attractive it is to the matter-of-fact mind that in order to recapture the dainty charm of Granada one only needs to apply the square root of two, or that the brooding mysticism of Chartres is to be had by designing with modules, or that the wild splendor of St. Mark's is but an exercise in whirling squares. But they should remember that, "In everything beautiful there is something strange about the proportions." It is the gay flouting of logic, the happy recognition of the sharp value of the discord, the aid to harmony to be obtained by the accent of dissonance.

It would not seem unfair to ask the proponents of these various get-art-quick methods to turn from their analysis of existing buildings and give an *a priori* demonstration of what their formulas can accomplish in the way of synthesis. Unless the results are as prompt and splendid as claimed we should not feel justified in recommending their methods.

There is one more school of critics who wish to be heard. They may be called "The Hygienists," and their axiom is, "We cannot have too much sun." Not light, but sun. This is assumed to be a self-evident truth and where formerly, in house building, they were content with plate glass windows and a sleeping porch, they now demand whole walls of glass from floor to ceiling. Whether this makes living more uncomfortable in July or January is a question. In July one slowly fries in the glare and heat of such a conservatory and in January to sit down among the snow drifts is far from cosy. We have, besides, the difficulty of keeping warm both physically and psychologically. And in all seasons we must suffer from the nervous exhaustion of so much undiffused sunlight. One need only observe how people of very hot and very cold countries manage these things, to be skeptical of this new movement.

Now what is the explanation of all these mistaken criteria? Why has the great multitude of art critics of all persuasions, in all times and places, done such an unsatisfactory piece of work, so unrelated to the plain facts everywhere observed? Can the unreality of their findings be traced to that bit of homely wisdom that, "Those who can't do, teach"? Or is it, perhaps, that the men of letters on the lookout for a good subject on which to exercise their dialectic skill in verbal pattern making have been attracted to art and architecture as a gentlemanly field for the parading of literary conceits and preciosity? That they have thought more of exhibiting their own skill than of bringing aid to a brother artist? If so, this would explain how, in a sort of literary ecstasy, they often soar to such a

high æsthetic plane in expounding the inner motivation and esoteric meaning of the work of some artist that the poor man listening with astonishment is like to exclaim in bewilderment, "Alack, but this is none of I." Has the temptation to such poetic flight proved irresistible to such craftsmen with the pen as Ruskin, Faure, Reed, or any of those lesser men who have to fill a column periodically in our magazines?

Have the philosophers also found in art a perfect perennial subject on which to exercise their subtleties—a drop of quicksilver on which each happily accepts the challenge to put his finger?

We are more encouraged to believe in these explanations of the existence of so much inept artistic dogma when we note that none of these writers on art are themselves artists. Artists, it seems, have nothing to say about art. All the advice comes from the bystanders. Artists do not even make reply. It is as if they did not hear. Seemingly, they are not interested. Have they different ideas or have they no ideas, or are they inarticulate? Strange people who apparently do not know how they work or why they work and do not wish to be bothered by the chatter of the reformers but prefer to be let alone in a great silence to paint and draw.

We are sometimes tempted to say, when we regard the rather ridiculous art works of our no less intelligent fathers, that it is all merely a matter of fashion—but when we ponder the great works universally admired throughout the ages we quickly realize that it cannot be dismissed so lightly as being entirely a caprice. No, our quarrel is with our leadership.

Art is long and there are no short cuts. Life is short and artists cannot waste time talking or listening.

All that we have been saying is, of course, destructive criticism of criticism and we have to confess that we are not holding back any constructive secret ready to bring it forth like a rabbit from a hat at the proper moment. We are only seeking to clear the ground of old encumbrances so that some more clear-sighted school of observers may view artistic labors with more realism, if less eloquence.

The quiet beauty of a winter landscape has been captured by Miles Sater, Chicago designer and delineator, in this lithograph which he has titled "The Farm." It is slightly reduced here from the size of Sater's original study

PENCIL POINTS DATA SHEETS

Prepared by DON GRAF, B.S., M.Arch.

DISREGARD OF THE OBVIOUS

Perhaps plumbing fixtures are coming in for more than their share of carping criticism in this department. For this reason, we have hesitated to add further fuel to the flame. However, a letter from a PENCIL POINTS reader points out a "Disregard of the Obvious" that has long been under suspicion in the mind of your deponent as probably being a private peeve. Apparently we are not alone in our conviction that the public Gent's Room is not a place to compromise with extreme sanitary measures. The reader inquires:

"Have you ever noticed that most bar, restaurant, pool room, filling station, and office building urinals are equipped with flush valves set above the flowing bowl, requiring manual operation? As a result of the

CAFÉ FLOORS, WALLS, CEILINGS, LIGHTING

Index No. **D10b** PLANNING

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

SET 14 OCT 1938

FLOORS. *The floors of all rooms in which food or drink is stored, prepared, or served, or in which utensils are washed, shall be of such construction as to be easily cleaned, shall be smooth, and shall be kept clean and in good repair. Kitchen floors shall be impervious to water.*

Public-health reason. Properly constructed floors which are in good repair can be more easily kept clean than improperly constructed floors. Kitchen floors having an impervious surface can be cleaned more easily than floors constructed of wood or other pervious or easily disintegrated material, will not absorb organic matter, and are, therefore, more likely to be kept clean and free of odors. Clean floors are conducive to clean food-handling methods.

Satisfactory compliance. The following requirements are implied conditions of satisfactory compliance:

(1) The floors of all rooms in which food or drink is stored, prepared, or served are of such construction as to be easily cleaned, are smooth, and are in good repair. Floors may be of concrete, terrazzo, tile, etc., or wood covered with linoleum, or tight wood floors.

(2) The floors of all rooms in which food is prepared or utensils are washed are constructed of concrete, tile or other impervious material, in good repair and provided with drains. However, where floors of such rooms are kept clean without flushing, a linoleum or similarly impervious surfacing in good repair shall be accepted in lieu thereof and the drain requirement shall be waived. If floor drains are used they shall be provided with proper traps so constructed as to minimize clogging.

WALLS AND CEILINGS. *Walls and ceilings of all rooms in which food or drink is stored, prepared, or served shall be kept clean and in good repair; shall be finished in light color; shall have a smooth, washable surface up to the level reached by splash or spray.*

Public-health reason. Painted or otherwise properly finished walls and ceilings are more easily kept clean and are therefore more likely to be kept clean. A light-colored paint or finish aids in the even distribution of light and the detection of unclean conditions. Clean walls and ceilings are conducive to clean food-handling operations.

LIGHTING. *All rooms in which food or drink is stored or prepared or in which utensils are washed shall be well lighted.*

Public-health reason. Ample light promotes cleanliness.

Satisfactory compliance. This item shall be deemed to have been satisfied if artificial light sources are provided equivalent to one 100-watt electric light bulb per 100 square feet of floor area, reasonably evenly distributed, and are in use except when equivalent natural light is present.

Condensed recommendations from tentative "Ordinance and Code Regulating Eating and Drinking Establishments" *by U. S. Public Health Service.*

CAFÉ LAVATORIES, TOILETS, WATER SUPPLY

Index No. **D10c** PLANNING

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

SET 14 OCT 1938

LAVATORY FACILITIES. *Adequate and convenient hand-washing facilities shall be provided, including warm running water, soap and approved sanitary towels. The use of a common towel is prohibited. No employee shall return from a toilet room without washing his hands.*

Public-health reason. The use of washing facilities and sanitary towels are essential to the personal cleanliness of food handlers.

Satisfactory compliance. This item shall be deemed to have been satisfied if hand-washing facilities, including warm running water, soap and individual cloth or paper towels are provided. Washing facilities must be adequate and convenient to the toilet rooms. Dish-washing vats shall not be accepted as washing facilities for personnel. Warm water must be on hand at all times or within a reasonable time after opening the faucets. Soap and towels should be provided by the management. No employee shall return from a toilet to a room where food, drink or utensils are handled or stored without first having washed his hands.

TOILET FACILITIES. *Every restaurant shall be provided with adequate toilet facilities conveniently located and conforming with the ordinance of the city. Toilet rooms shall not open directly into any room in which food, drink or utensils are handled or stored. The doors of all toilet rooms shall be self-closing. Toilet rooms shall be kept in a clean condition, in good repair, and well lighted and ventilated. Hand-washing signs shall be posted in each toilet room used by employees. In case privies or earth closets are permitted and used, they shall be separate from the building, and shall be of a sanitary type constructed and operated in conformity with the requirements of item 10r of the U. S. Public Health Service Milk Ordinance and Code.*

Public-health reason. The need for toilet facilities and the necessity for protecting the food from toilet-contaminated flies are obvious.

Satisfactory compliance. The following requirements are implied conditions of satisfactory compliance:

(1) The toilet room, stool, etc., are kept clean, sanitary, in good repair and free from flies.

(2) Durable, legible signs are posted conspicuously in each toilet room directing employees to wash their hands before returning to work. Such signs may be stenciled on the wall to prevent removal.

(3) A booth open at the top shall not qualify as a toilet room.

WATER SUPPLY. *The water supply shall be easily accessible to all rooms in which food is prepared or utensils are washed, and shall be adequate and of a safe sanitary quality.*

Public-health reason. The water supply should be accessible so as to encourage its use in cleaning operations; it should be adequate so that cleaning and rinsing will be thorough; and it should be of safe, sanitary quality in order to be suitable for drinking and to avoid the contamination of food and utensils.

Condensed recommendations from tentative "Ordinance and Code Regulating Eating and Drinking Establishments" *by U. S. Public Health Service.*

current drive against social diseases, I, together with a million other clean-living Americans, am rapidly tiring of pushing and stabbing at knobs and buttons with my sleeves. Cannot these all be set in the floor?"

In the illustration is shown a type of urinal flush valve designed for foot operation. It is set in the wall; it is a sufficient distance from the floor so that it can be easily touched by the foot, but still allows an unobstructed floor surface to facilitate cleaning. There will always be some male *schwein* who will not be tempted by the convenience of such a valve to flush the urinal after use. Nevertheless, the percentage of those who operate the flushing mechanism is very much greater with the foot type of valve than with the manual type—improving the olfactory purity of the room to a marked extent, as well as eliminating the visual revulsion felt by men who are civilized enuf to be fastidious.

In entering the toilet stall, the arrangement and fitments favor bashful privacy to a considerably greater extent than they do the occupant's sanitary sensibilities. It is necessary to handle the door knob on the inside and the outside as well as the flush valve. Just why it should be necessary for any psychologically healthy male to lock himself in the toilet cubicle is a little difficult to understand. Why, too, seat-operated valves are not in common use is another open question.

While we are on the subject, we should very much like to sentence to eternal hell fire and damnation the inventor of the most fiendishly annoying contraption known to man — the paper-saving toilet roll holder which lets you remove not more than $0.000245 worth of the thirsty fiber tissue per attempt.

We propose as an ideal situation to be realized in some far distant city of the future, that toilet rooms be arranged so an individual can enter, use any or all of the sanitary conveniences provided, and leave without touching any object with his hands that any one else has previously touched. Merely our suggestion.

CAFÉ DOORS, WINDOWS, VENTILATION, ETC.

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PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

SET 14 OCT 1938

STORAGE AND DISPLAY OF FOOD AND DRINK. *All food and drink shall be so stored and displayed as to be protected from dust, flies, vermin, handling, droplet infection, overhead leakage and other contamination. All means necessary for the elimination of flies shall be used.*

Public-health reason. Food or drink not properly protected from contamination may become a public-health hazard.

Satisfactory compliance. The following requirements are implied conditions of satisfactory compliance:

(1) The presence of rodents, roaches, ants or other vermin shall be considered as violating this item. Food or drink shall not be stored on floors which are subject to flooding from sewage back-flow, such as those below street level.

(2) All unwrapped or unenclosed food and drink on display are protected by glass or otherwise from public handling or other contamination, except that approved hand openings may be permitted on counter fronts.

(3) All supplementary means necessary for the elimination of flies, such as fly-repellant fans, fly paper, fly traps or fly-killing sprays or powders are employed.

DOORS AND WINDOWS. *When flies are prevalent, all openings into the outer air shall be effectively screened and doors shall be self-closing, unless other effective means are provided to prevent the entrance of flies.*

Public-health reason. Flies may contaminate the food with disease organisms, thus nullifying the effectiveness of all other public health safeguards.

Satisfactory compliance. The following requirements are implied conditions of satisfactory compliance.

(1) All openings to the outer air are effectively screened with not less than 16-mesh wire cloth, and

(2) All doors are self-closing and screen doors to the outer air open outward; or

(3) Fans of sufficient power to prevent the entrance of flies are in use at all ineffectively protected openings; or

(4) Flies are absent.

(5) Window and door screens must be tight-fitting and free of holes. This includes the screens for skylights and transoms.

VENTILATION. *All rooms in which food or drink is stored, prepared, or served, or in which utensils are washed, shall be well ventilated.*

Public-health reason. Proper ventilation reduces odors and prevents condensation upon interior surfaces.

Satisfactory compliance. This item shall be deemed to have been satisfied if all rooms are adequately ventilated so as to be reasonably free of disagreeable odors and condensation. Ventilation equipment supplementary to windows and doors, such as adequate exhaust fans or stove-hoods, shall be provided if necessary.

Condensed recommendations from tentative "Ordinance and Code Regulating Eating and Drinking Establishments" *by U. S. Public Health Service.*

CAFÉ EQUIPMENT, WASTE DISPOSAL, ETC.

Index No. **D 10 e** PLANNING

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

SET 14 OCT 1938

CONSTRUCTION OF UTENSILS AND EQUIPMENT. *All eating and cooking utensils and all show and display cases or windows, counters, shelves, tables, refrigerating equipment, sinks and other equipment or utensils used in connection with the operation of a restaurant shall be so constructed as to be easily cleaned and shall be kept in good repair.*

Public-health reason. If the equipment is not so constructed that it can easily be cleaned, and is not kept in good repair, it is unlikely that it will be properly cleaned.

Satisfactory compliance. The following requirements are implied conditions of satisfactory compliance:

(1) All surfaces with which food or drink comes in contact consist of smooth, not readily corrodible material.

(2) All surfaces with which food or drink comes in contact are in good repair, free of breaks, corrosion, open seams, cracks and chipped places.

(3) All surfaces with which food or drink comes in contact are easily accessible for cleaning, and are self-draining.

(4) All display cases, windows, counters, shelves, tables, refrigeration equipment, stoves, hoods and other equipment are so constructed as to be easily cleaned, and are in good repair.

(5) The above requirement precludes the use of any type of equipment so designed as to permit food or drink routinely to come in contact with threaded surfaces.

(6) In all cases where a rotating shaft is inserted thru a surface with which food or drink comes in contact, the inspector shall assure himself that the joint between the moving and stationary surfaces is close fitting.

DISPOSAL OF WASTES. *All wastes shall be properly disposed of, and all garbage and trash shall be kept in suitable receptacles in such manner as not to become a nuisance.*

Public-health reason. All garbage, refuse and liquid wastes resulting from the normal operation of a food or drink establishment should be properly disposed of so as not to become a nuisance or a public-health menace.

REFRIGERATION. *Waste water from refrigeration equipment shall discharge into an open sink or drain, properly trapped and sewer connected, provided that where sewer connections are not available, clean adequate water-tight drip pans may be used.*

MISCELLANEOUS. *The surroundings of all restaurants shall be kept clean and free of litter or rubbish. None of the operations connected with a restaurant shall be conducted in any room used for domestic purposes. Adequate lockers or dressing rooms shall be provided for employees' clothing. Soiled linens, coats, and aprons shall be kept in containers provided for this purpose.*

Condensed recommendations from tentative "Ordinance and Code Regulating Eating and Drinking Establishments" *by U. S. Public Health Service.*

AMERICANA

SPIRIT OF EARLY BUILDINGS TRANSCENDS PERIODS

BY TALBOT F. HAMLIN

I HAVE been trying to learn what American architecture is, to pick out—at least in one part of America, the New England coast—those controlling ideals or methods which, almost regardless of period, create the spirit of buildings we call American. In New Bedford, in Wood's Hole, on the islands of Martha's Vineyard and Nantucket, there is a wealth of beauty characteristic of its locality and of the people who produced it. There is work of the 18th century, the "Late Colonial," of the Post-Revolutionary Period, of the Classic Revival, of the Jigsaw Period, and of that epoch from about 1885 to 1905 when so many summer cottages, often with considerable loveliness, were built along these shores.

The character of all of these buildings is not a matter of period; the current styles wax and wane as the decades pass by, and touch the basic forms and the basic feeling but gently, like cloud shadows over the sea, which, despite their purple streaking, remains the sea still. Throughout these periods in which these buildings were especially numerous this is true, and whether the building is the simple cottage of 1770-1820 like the 'Sconset cottage shown herewith, whether a Late Colonial double house like the Nantucket houses, whether decked with the grandeur of the Greek Revival like the 1840 houses in Nantucket shown, or even whether the jigsaw of Oak Bluffs or the modern cottages of Wood's Hole, there is in all some quality of peculiar charm, of harmony with the location, which one can only call, perhaps, their essential American character. If one could analyze this and find the elements that go to make it up, it seems to me that a great step would be made in the correct appraisement of our contemporary work.

The first of these qualities, the most obvious reason for the delight one feels in walking through these coastal towns, is harmony—the controlled harmony between the big and the little buildings, between the simplest, most meager cottages and the largest and grandest of whalers' homes, between the houses and the churches and the public buildings. It is also a harmony between the buildings themselves

The houses of Siasconset, Nantucket Island, Mass., built close to the street and to each other, harmonize in material and roof slope. These all have their walls, windows, chimneys, doors, and space where required—that is all

All photographs by the Author

Harmony, simplicity and restraint are characteristics of a Nantucket street. Simple elegance appears in the "row houses" above, providing pleasant living space. In the "double house," at left, the horizontal emphasis is relieved by a subtle change in placement of the windows, giving naturally a variation in the rhythm

and the land they are on—a generally gently rolling country with sandy bluffs and a few rocks by the all-encircling sea, a country grown with pitch pine and scrub oak, and varied with rolling moorland of russet grass, stone walls, and the rich greens of blueberry, bayberry, and sumac. It is a country with a strange and quiet magic, lush in its sea-blown vegetation, yet restrained and somehow, as it were, disciplined by the sweeping winter gales.

The harmony between the buildings is a harmony of roof slopes, of window sashes and rhythms, and of a certain reticence in detail—a reticence which was lost only in the jigsaw period, and then only to be replaced by an exuberant delight in craftsmanship. The silver gray of weathered shingles contrasts almost everywhere with the shining white paint of trim and sash. Where the buildings are of brick, the white of the woodwork carries through to make a pleasant transition; and, where stone is used, it is the rough gray granite of Massachusetts, as in the Langshaw house in New Bedford, or the New Bedford Customs House—a gray granite that is severe and yet has some of the quality of the shingles.

The feeling for proportion in these native works is extraordinarily sensitive. The rightness of placing of doors and windows runs through all of it, ties all of it together. Even the Menemsha fish houses carry the same interest of wall and roof relation, the same unconscious beauty of window size and window position. Even the jigsaw houses of Oak Bluffs maintain something of the same innate sensitiveness, which makes them somehow part of the total picture and prevents them from being the monstrosities that so many of the buildings of their time were.

The second quality which runs through all seems to be a feeling which the builders had for the materials they were using. Whether it is wood shingles or neat white trim, whether it is brick or granite, it all is used in a way that seems to have a perfection, in its expression of the material, which is a continual delight. Wood trims, particularly in the houses built around 1820 to 1840, are full of variety. Those who look for the sophisticated elegance of Beacon Hill may be disappointed, but instead there are all sorts of local decorations, such as pilasters made by applying half-round mouldings to a flat strip, and cornices that are simple, thin shelves with a delicate moulding below. Whatever the variety, and whether the style be the slimness of the late colonial or the dignity of the Greek Revival, this same unsophisticated naturalness of finish holds true and seems somehow to incarnate the very spirit of wood and to show the tools—the saws and planes and chisels—which gave it birth.

The brick is also characteristic, reticent in its texture, sure and strong in its color. A smooth, deep red brick is well-nigh universal, laid with tiny joints—not over a quarter of an inch—to make the smoothest wall which the mason could produce. This quiet, warm plane of wall, with the most reticent texturing of joints, gives at once an impression of permanence, of a certain gentlemanly solidity, which more varied walls must lack.

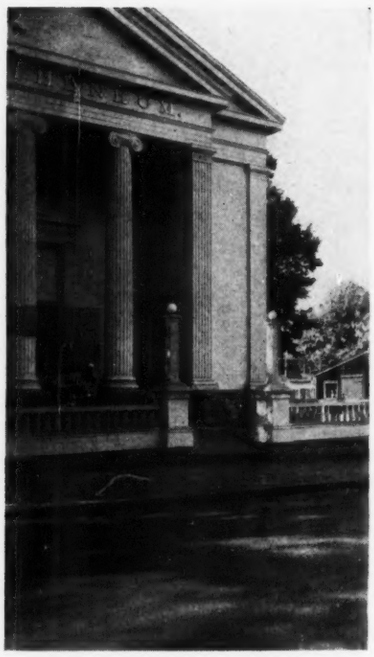
Granite, on the other hand, is usually but roughly axed to an approximate plane, save where architectural members demand more careful tooling, in which case the workmanship of these is as fine as could be desired. The Langshaw house and the New Bedford Customs House both show the subtle stony texture thereby achieved, and the interesting contrast of the smoothness of antae and the textured roughness of wall.

Yet in all of this subtle handling of material there is seldom any display. Almost never does the designer seek to express his material first and foremost; rather, the building is always paramount and the material used in the quietest, most fitting way to build the building, rather than the building used to display the material.

The third great quality is restraint, a restraint to be expected from the builders of Nantucket, New Bedford, and Martha's Vineyard. Like the sense of material, this restraint is never forced; there is never any sense of meagerness resulting from it. It has an elegance of its own, like the elegance of quiet good manners—never artificial, but a simple expression in architecture of the way these people lived and felt and thought. This restraint never becomes a pose. Ornament is used sparingly, but it is used. The impression seems to be that the builders of these houses, these churches and public buildings, were looking for the most elegant and the richest buildings which they could afford and which were at the same time harmonious with their tastes. Since their taste in elegance ran towards the restrained and the austere, is it strange that their buildings have the same quality of gracious and controlled austerity?

The last quality which stands out is the frankly urban character of these towns and villages. There is no romantic nonsense here about country life; rather, the builders of Nantucket or Vineyard Haven, of New Bedford, of Marblehead and Portsmouth seem bent on creating the most closely knit, the most urban community which their resources would permit. Houses are close together and near the street; even when the houses and their grounds are large, only a narrow strip, usually banked with gay flowers, separates each mansion from its neighbor and leads back to the ample tree-shaded lawns behind. The smaller houses are built frankly together, sometimes as double houses, sometimes as rows, sometimes merely as individual houses built with eaves almost touching. All of them are close to the street, and this quiet alignment of house after house, down a sloping or curving street vista, adds not a little to the effect of these towns. The brick sidewalks, granite curbs, cobbled streets, and ranked lovely buildings, closely spaced, give Nantucket even today an expression of urban dignity and urban amenity not to be found in thousands of more recent towns of three or four times its size. The same feeling extends even to the smaller villages like 'Sconset, where the tiny houses shoulder one another closely along the

Main Street grandeur of 1815 in Nantucket is exemplified by the wealthy whaler's house, lower right, notable for its generous dimensions and perfect restraint. The elegant refinement of the large houses of the early 19th century also is seen in the examples on Sixth Avenue, New Bedford, shown above and left



The dignity of the Greek Revival buildings of Nantucket is well represented by the homes on Main Street, left, both from the early Forties, while the Langshaw House at New Bedford, center, for which Russell Warren was the architect in 1837, is a monumental example in granite. The brick walks, stone curbs, and houses lined along Nantucket streets create an unforgettable effect. The Ionic Order was chosen to enrich the facade of the Library and Atheneum of the town, right, the structure following somewhat the lines of a church which had occupied the site

narrow streets, or like Menemsha, where the fish houses group along the pier as closely as the swordfish boats which lie off them.

This quality, it seems to me, is more than a mere accident. Behind it is no land poverty, no sense of congestion forced by land speculation, but, instead, some kind of basic neighborliness, some kind of real love of and respect for one's fellowmen, which is at the very foundation of the American ideal of democracy. There was, of course, from whaling days on, wealth in all the towns, and predatory wealth too, as well; yet the impression which they make today is not one of unbridled competition, of the wealthy dominating and crushing the poor, of mansion and slum, but rather of a true community in which cooperation and mutual helpfulness are after all supreme.

* * * *

Changing fashions of the 19th century swept over this country as they did everywhere; and, though the underlying qualities remained constant, each style brought its own especial qualities—these New Englanders were obviously no reactionaries, but rather sought to be as modern as they could. The first period, the Colonial, in these parts, has the great basic virtue of simplicity. The same basic proportions are found here that are found elsewhere in Colonial America, but the spirit is perhaps somewhat more stark, the houses are smaller, the trim often merely a board around the openings, the gable moulds are universally flat, close to the wall, and give the houses a sense of tight neatness. The same quality held through the late Post-Revolutionary period, up almost to the time of the Classic Revival, although the growing wealth that came from the whales of the Pacific and the Atlantic brought larger windows, occasional dentil cornices, and a universal attempt to ornament simply the entrance door. Yet the strong, tight power of the earlier style remained, and there is little here of the Adam and Paine refinements which so frequently prettified the early houses of the Republic in the more populous and more central localities. The new elegance is one of ample scale rather than of rich and finicky details. The richest and most elegant of the houses of this type is that pictured on Sixth Avenue in New Bedford, with its ionic porch and its delicate cornice; but even that is exceptional—one is more likely to find such quiet fronts as those shown in Nantucket.

The Greek Revival brought, of course, new ideals and a new grandeur, which shows in all the buildings built between, say, 1825 and 1850; yet, even with the Corinthian and Ionic columns of the Revival, the basic quality of dignified restraint and grandeur, of quiet detail, held true. Even where the detail is as rich

and as architectonic as in Russell Warren's Langshaw house in New Bedford, this richness seems subsidiary to the large and ample monumentality of the whole. The New Bedford Customs House, like almost all of Robert Mills's work, has of course severity as one of its most marked characteristics. Yet the Nantucket Atheneum maintains something of the same quality, and, especially in its great entrance doorway, has the same quiet and assured dignity to be found in the earlier work.

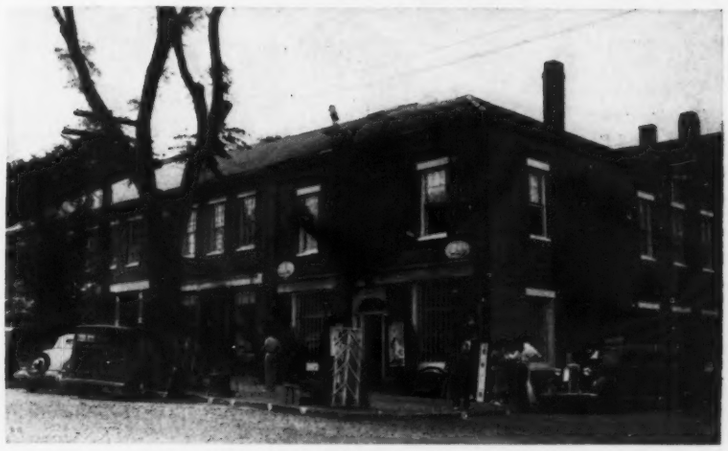
The period of the 1870's is one of the least understood of all the periods of American architecture. Martha's Vineyard offers an unusual opportunity for studying it, for around a famous camp meeting center there grew up, especially in the 'sixties and 'seventies, an extraordinary group of jigsaw dwellings. At first, tiny houses built in a circle around the tabernacle replaced the earlier tents; later, as wealthier people were attracted, the colony spread out, and now a charming waterside park is almost surrounded with more lavish examples of the same period.

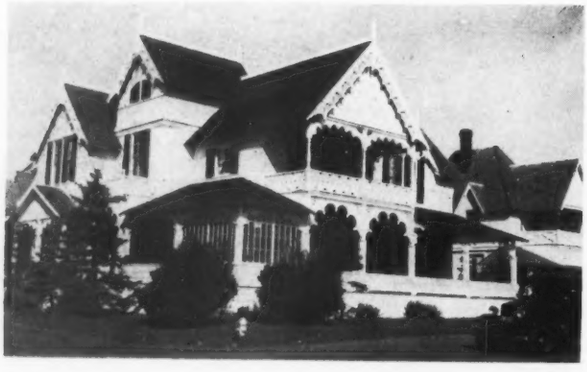
Of course, taking it as a whole, this period is one of the least admirable in all the developments of American building. The terrific effects of over-rapid exploitation, of cutthroat competition, of economic "success" are obvious in the forced ostentation, the over-lavish and ill-considered detail which curses so much of this work; yet in Oak Bluffs, where there is so much of it to see, and where economic limitations sometimes prevented the utmost in display, the effect of the whole has a queer charm of its own. After seeing enough of it, one begins to pick out the better from the worse, one begins to examine it critically, one loses his sense of derision and comes eventually almost to like it.

The tabernacle itself is a remarkable piece of light and airy steel work, carrying roofs of wood. It is open at the side all around and stands in a generally circular lawn; around it are grouped tiny cottages close together. The little Gothic cottage shown is typical of a sort of tight and compressed character not unrelated to the earlier work of Nantucket or the fish houses of Menemsha.

In the larger houses, where evidently thousands were spent, the results are more questionable; yet even in these the basic propor-

The wharves and fish houses of Menemsha, Martha's Vineyard, are a delight to study. These New England industrial buildings are harmonious in material and in natural sense of form. In Nantucket, commercial buildings of the early republic include the structure at lower left, built at the end of the 18th century as a combined courthouse and warehouse and now used by the retired sea captains of the Pacific Club. The brick block of shops on Main Street, lower right, dates from 1846 and is characteristic in its quiet, ample proportions and its simplicity





In the jigsaw work of the Seventies, when woodworkers were most exuberant, there is much to examine. On the park at Oak Bluffs, Martha's Vineyard, a hardware magnate had the house shown at the top built in 1873 —a fantasy of lattice and jigsaw, porches and gables. Below it are the "Gothic" cottages built around the Oak Bluffs tabernacle, itself an airy structure of steel with wooden roofs. The summit of the woodworker's inventiveness was reached in the lower house, built on Shore Road, Oak Bluffs, about 1875, in the "Gothic" style

tions are often sound. What impresses in them, however, is not the question of proportion or of composition, but rather the most exuberant delight in wood for its own sake, worked with all the available tools and made into a foundation for an extraordinary, dreamlike fantasy. Structural members are usually strongly stressed, brackets and braces are elaborated, but all of them on analysis seem to do the work they are supposed to do. The jigsaw worker's genius finds its opportunity in the spaces between them, and example after example has a lace-like quality in these fillings of spandrels and of gables which is, I believe, unexcelled elsewhere. It is the old feeling for material made into the supreme quality in building. The patterns vary enormously. Plain rectangular lattice vies with pseudo-Gothic details and the intricacies of flat pierced boards of almost Moorish complexity. At times the expression is simpler, like the great bracketed awning and the benches of the pier head store building at Nantucket; but generally the impression is one of delicate frivolity, a sort of wood worker's holiday, the feeling for material gone mad.

It is interesting to observe just what it is that separates the examples which are definitely unpleasant from those which remain merely amusing or even charming. Tastes will vary in setting this line of separation, yet it seems to have something to do with the quality of artificial and forced display. Where the decoration is merely that of panels between structural members, any amount of intricacy seems acceptable (of course within the limits of the style); it is when the structural members themselves begin to be contorted and artificially worked over, when the builder's sentiment seems to have been the desire to outdo or outshine the work of his neighbor, when the display of technical skill and the expression of the material seem to become the only thing in the designer's mind, when the house owner seems to have tried to be even more "modern" than his neighbor, that the building becomes a monstrosity.

The next period which has left large traces on these shores is the cottage-building period of the 1890's and the early 1900's. Literally hundreds of summer cottages were built during this era, and in general it is surprising how high their level of design is, and with what charm many of them sit on their wooded knolls or nestle close among the sumacs by the shore. The effect of Richardson's revolutionary shingle houses is everywhere apparent, and the best of these cottages seem imbued with the same qualities of simplicity, of harmony

with each other, with the old work, and with nature which is so apparent in the work before the Civil War. Again it is the color-chord of silver-gray shingles and simple white board trim. It is the flat gable moulds and the simple dormer windows. Window areas are large and the windows distributed where they are needed, yet usually with effective relationships —grouped, coupled, or single as the case may be. The gambrel roof is well-nigh universal, and its general convexity of outline goes well with the forms of the shore. These houses weather well and wear well; their wide, low rooms and spreading porches are welcoming and restful. In them there is seldom a trace of conscious stylism; they achieve their effect by directness, honest simplicity, and beauty of material and shape. They constitute a unique flowering of American architecture.

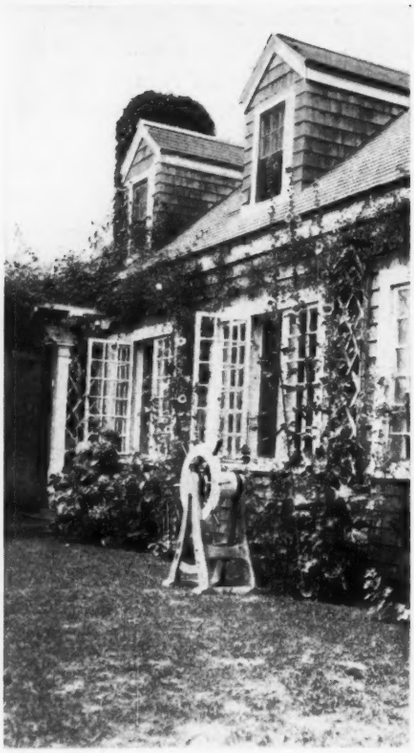
Yet summer building did not cease with the passing of that simplicity. The "Colonial" became popular and Colonialization swept in like a tide. It is strange how this modern pseudo-Colonial work stands out with all the arrogant newness and awkwardness of an ill-mannered child. It is all so pat, so too-too-Colonial—more Colonial than any building that the colonists ever built. It is all so white, so sharp, so lacking in any spirit of human reality. Stilted and mannered like a schoolboy's translation of a classic, it reveals only a wistful desire to be something other than it is. Beside it, even the jigsaw work of Oak Bluffs somehow seems real.

There are, of course, exceptions. There are many delightful additions and alterations of old houses in which the spirit of the old has somehow been preserved, and there are a few frank reproductions of the earlier types which, seen in general and as a part of the village picture, are not without effect. Yet, in almost every case, even there something seems lacking. It brings up the whole question of whether, even with the most reverent and understanding taste, a real reproduction is possible. Two temptations are ever-present—to change the original so as to make it more convenient, or, on the other hand, to display all you know about the style which you are attempting to reproduce; and to the sensitive eye it is usually an easy matter to pick out the real from the reproduction, and often one cannot help feeling in the reproductions qualities of strain or even of ostentation which are the direct opposite of the quiet simplicity of the earlier structures.

* * * *

If it is desirable that contemporary architecture here in America should be American,

Also on the park at Oak Bluffs, Martha's Vineyard, are found these houses, above, representing a tour de force of the Jigsaw Period. In the same spirit, though lacking the tracery and pierced work, are the great brackets of the store and waiting room on Nantucket pier, below, where bench and sheltering roof are made in one



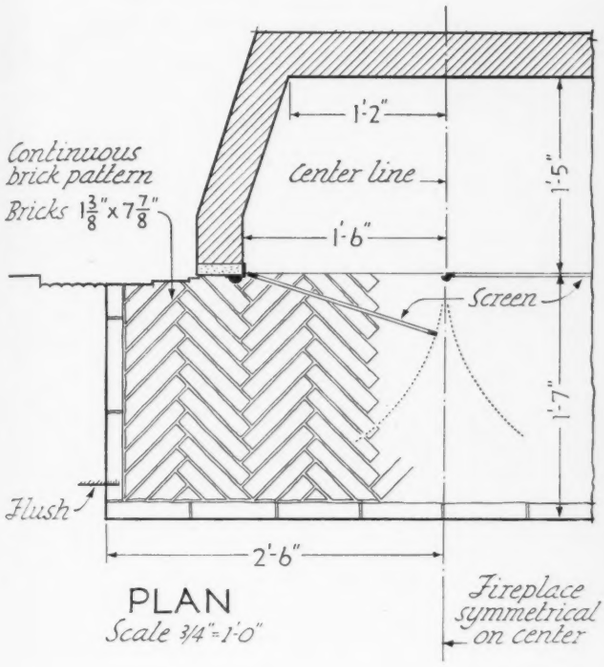
In the Nineties and the first years of this century, the cottages at Wood's Hole, left, were built. Weathered shingles, large chimneys, gambrel roofs, ample windows, and gleaming trim are marks of these houses whose nascent "Colonialism" later was to destroy their naturalness and much of their charm. Vine-grown and comfortable, these fitted well into the moorlands along the New England shore. In much the same style, the best examples of the recent work at Siasconset, right, suffer only from sentimental stylism such as the over-detailed pergola and the misplaced ship's wheel. It is a Nantucket tea room that is known as The Chantecleer

and if it is true that many of our ideals of democracy, of culture, of cooperation are the same today as they were a hundred years ago, is it too much to hope that some of the qualities that make the charm and the beauty of these old seaport towns should somehow be incarnated in it? Perhaps our study of the qualities inherent in the architecture of this New England shore may be of assistance here. Harmony of general form with site and with the neighboring buildings—may not that be a valid ideal still? Surely the sensitiveness to shape and to proportion of window and wall, of wall and roof, is a quality not of styles but something much more fundamental; and, if our American architecture of these four periods has shown it as one of its basic merits, can we not expect the same sensitiveness, the same graciousness and subtlety, in the handling of proportions of our more varied forms?

The feeling for material so evident in this work is another quality to be sought and one that is particularly important today. To express a material by using it rightly, and yet never to make a display of technical ingenuity an end in itself—this would seem to be the way in which our forefathers produced the beauty they created. Today, the temptation so frequently is—like the temptation the jigsaw builders sometimes fell victim to—the temptation to take our gorgeous new materials and design these rather than design a building, to make our architecture a *tour de force* of strained expressiveness rather than a gracious use of the structural riches we possess. To express and not to display, to build a building and not a *tour de force*—this, it seems to me, is the aim of architecture.

And the last quality, the frankly urban character of these towns, with all it means in democracy and cooperation, is perhaps as important as any of the other, more tangible matters. This is a quality we have, it would seem, begun to learn; and, in suburban building, our growing use of row houses, our growing attempt to develop a tightly-knit community, there is promise of more than architectural beauty, there is promise indeed of a new civic consciousness, a new feeling of unity, a new democracy and cooperation. If only all our developers of suburbs could visit Nantucket and Greenbelt, and learn the same lesson from both the old and the new!

The Firm of
ELY JACQUES KAHN
Architects



SAMUEL H. GOTTSCHO

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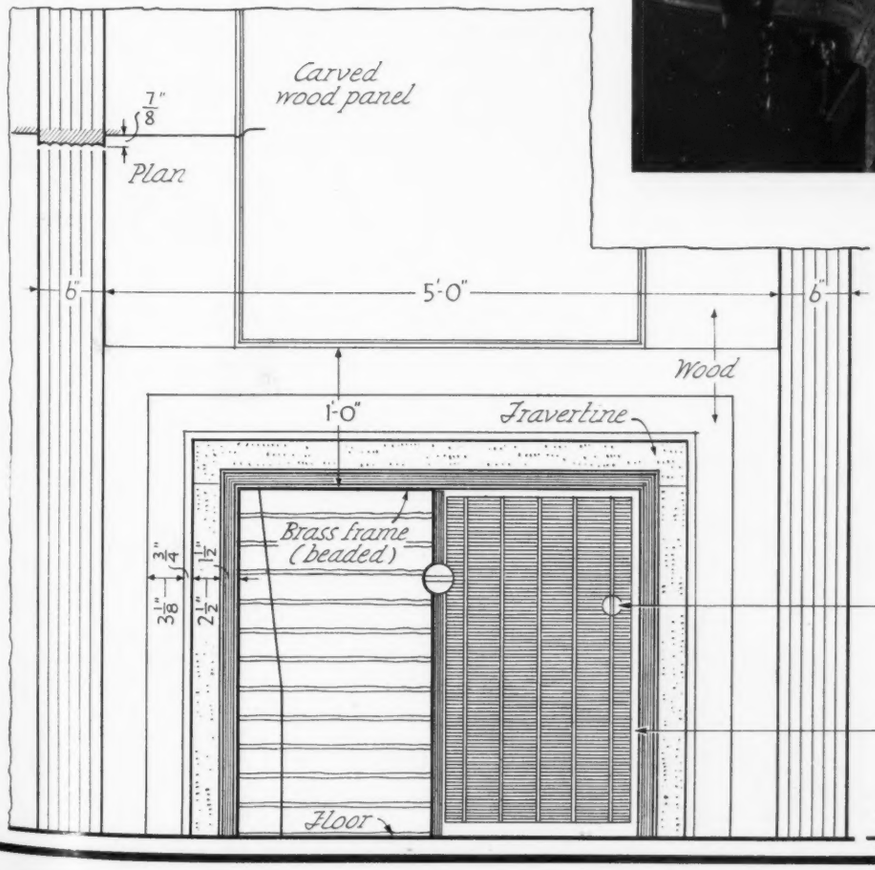

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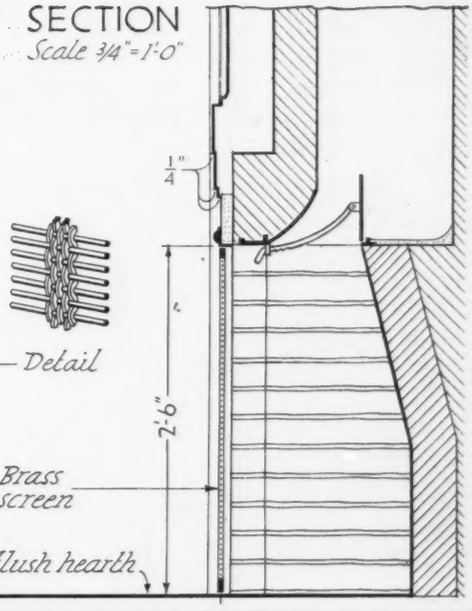

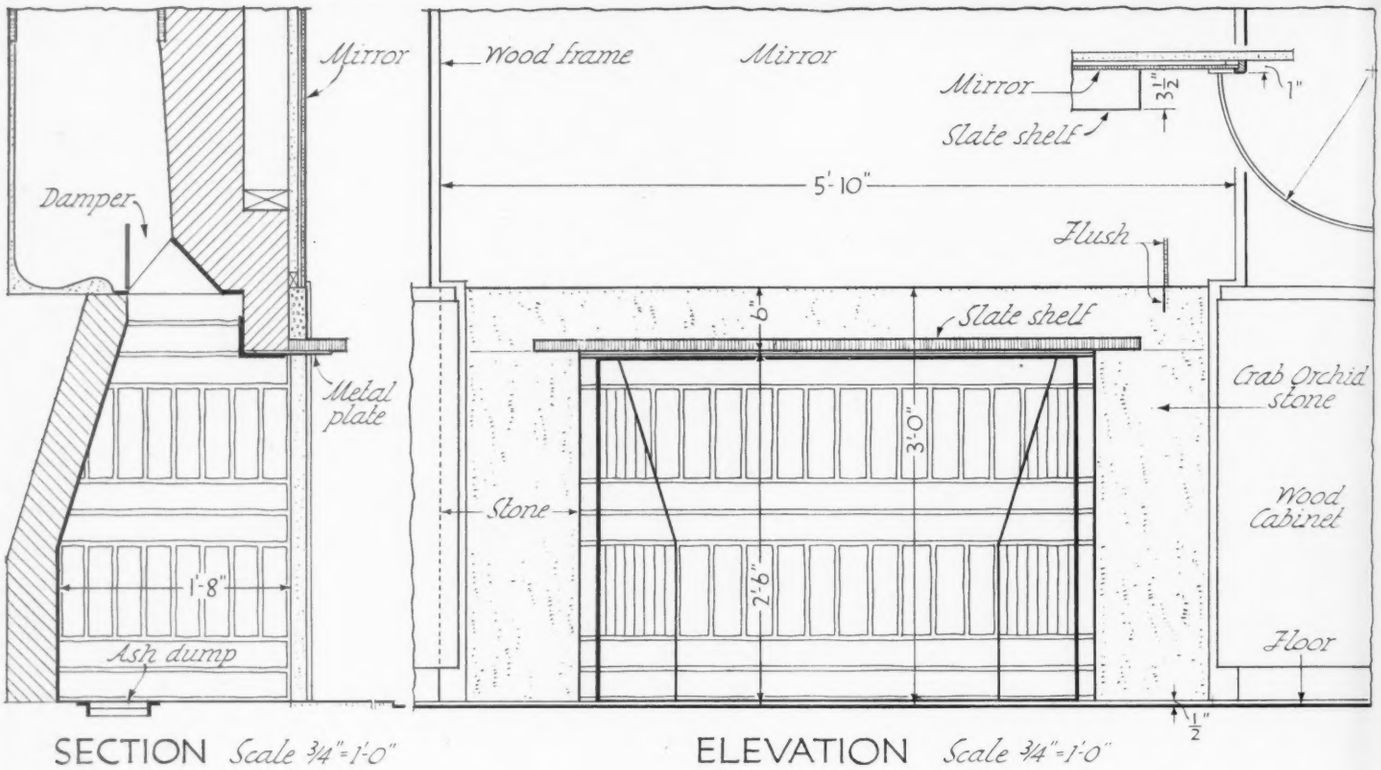

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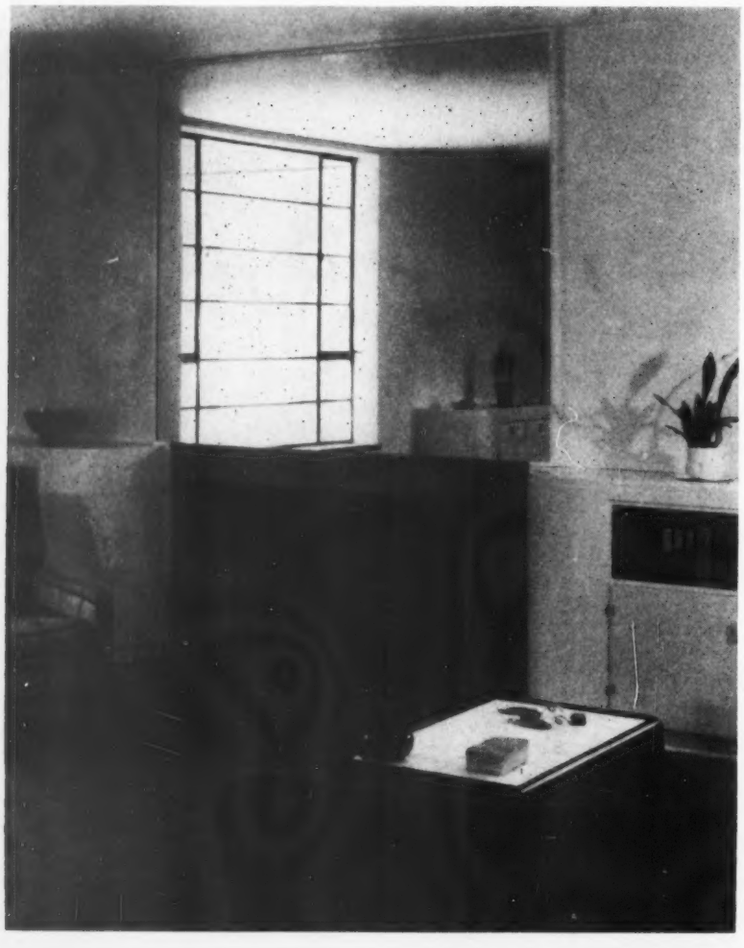
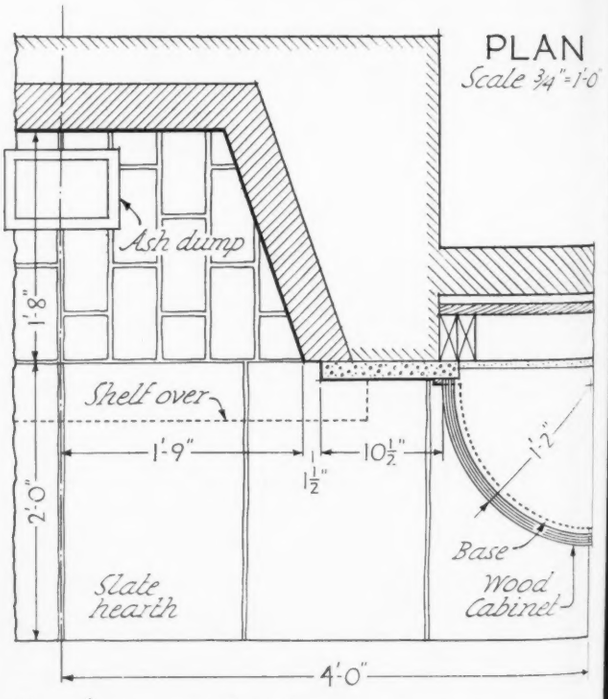
ELEVATION *Scale ¾"=1'-0"*

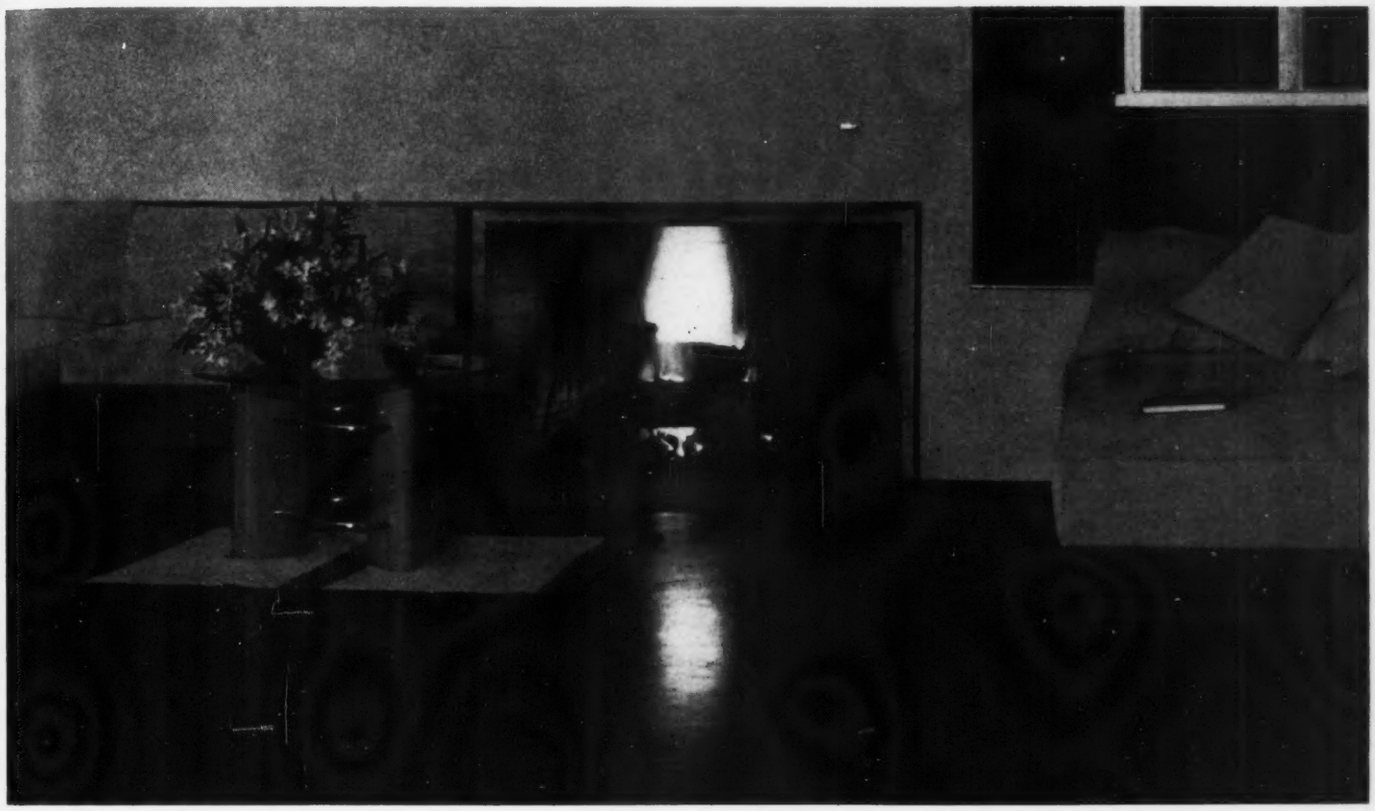
CARL F. WAITE



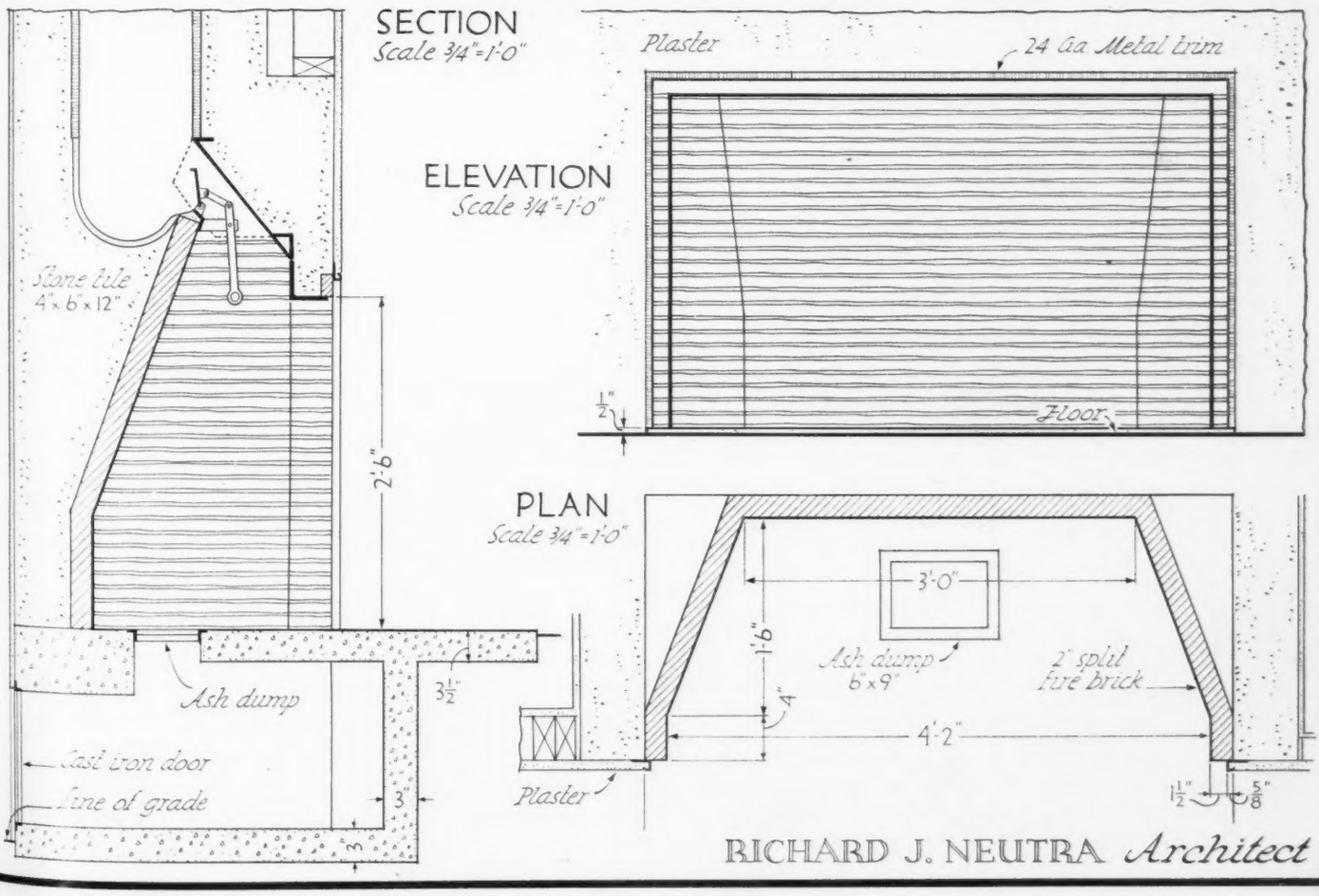


Fireplace symmetrical on center line

HAYS, SIMPSON & HUNSICKER
Architects

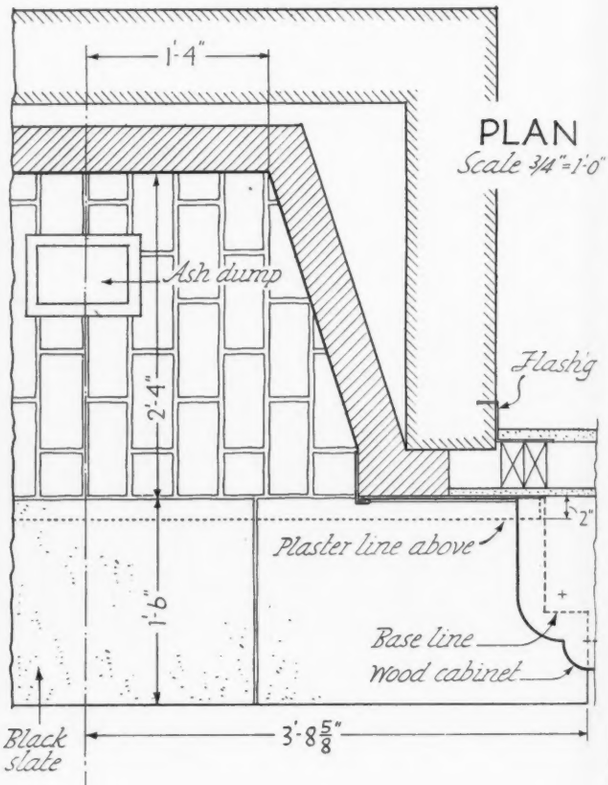


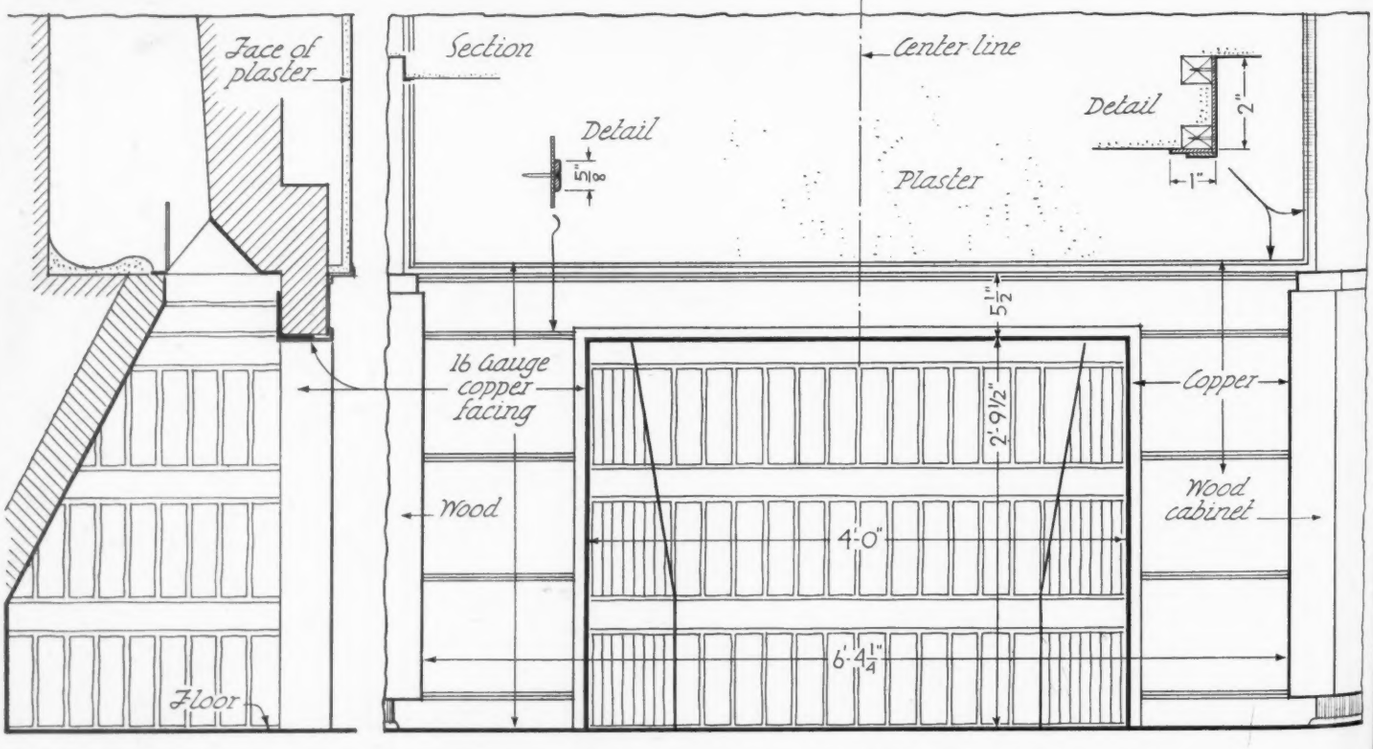
JULIUS SHULMAN



CARL F. WAITE

HAYS, SIMPSON & HUNSICKER
Architects





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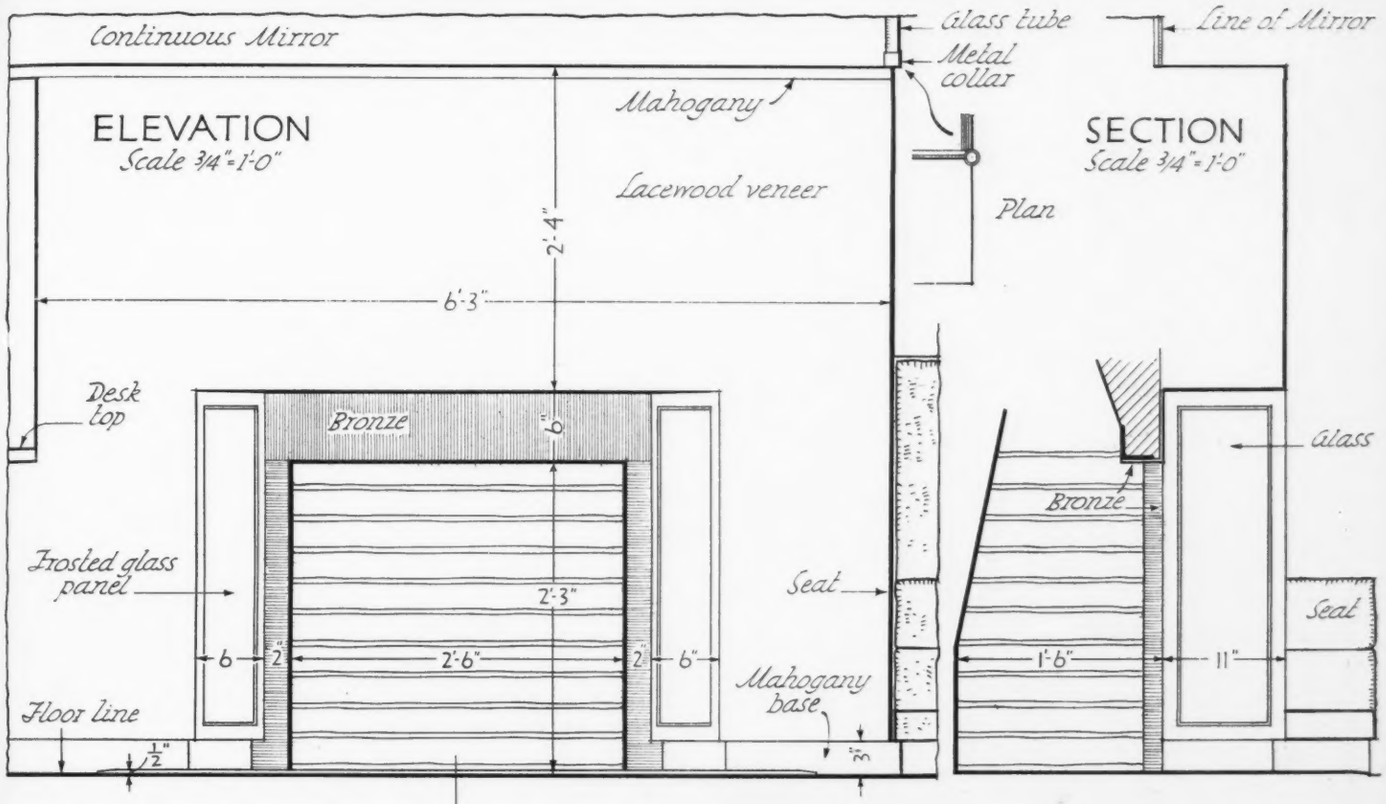
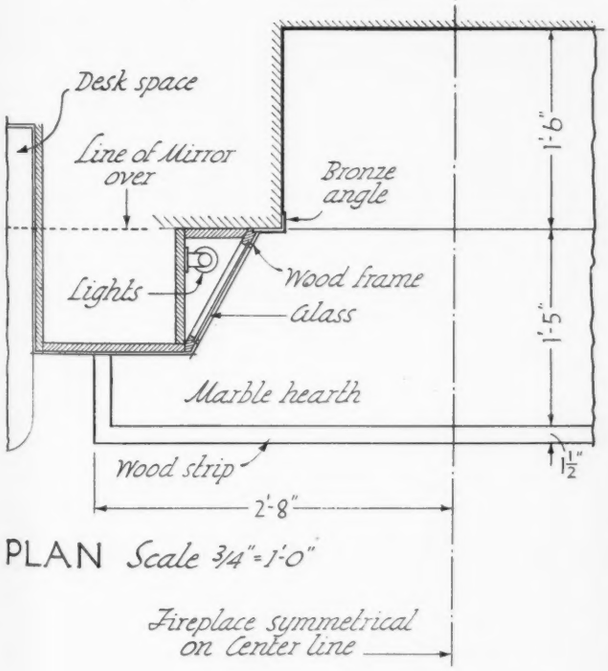


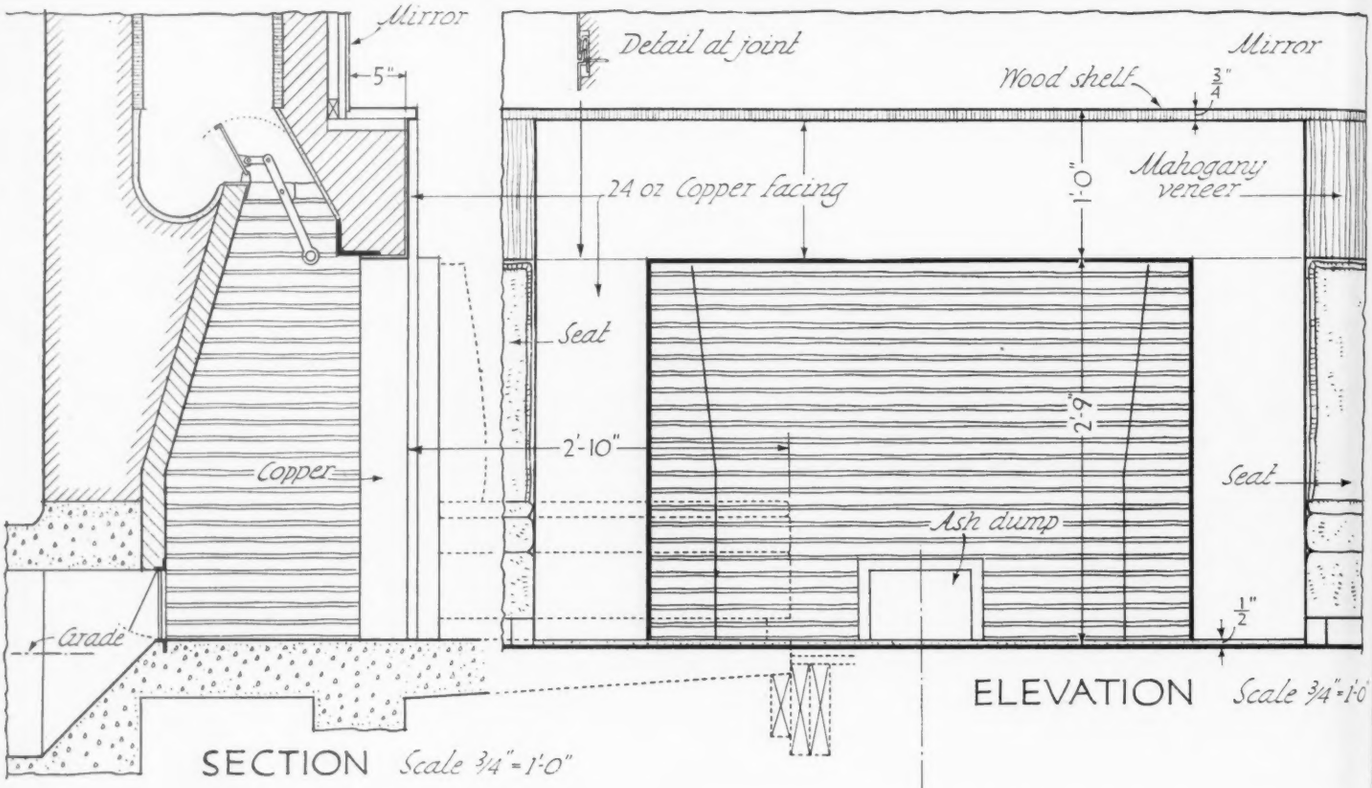
PALMER SHANNON



PLAN Scale 3/4"=1'-0"

Fireplace symmetrical on Center line

VAHAN HAGOPIAN
Architect



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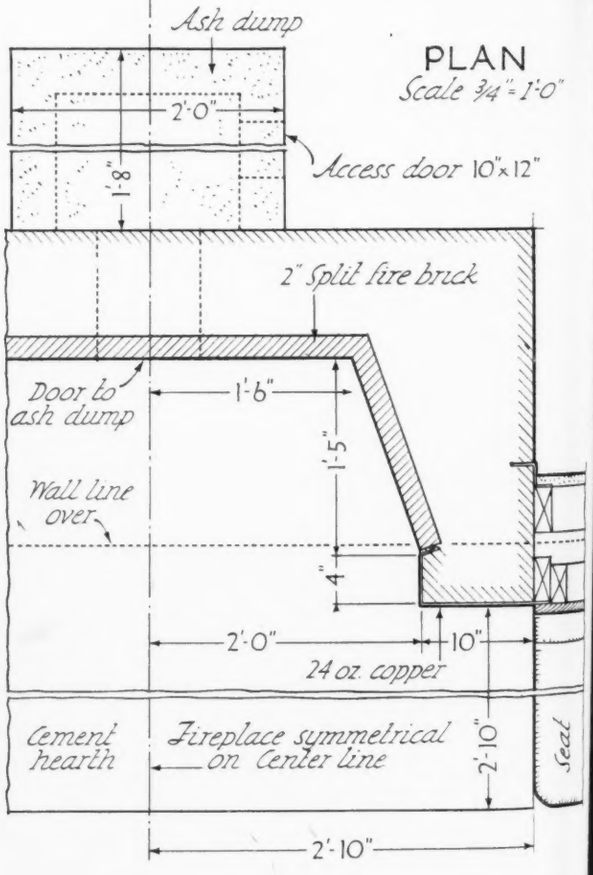
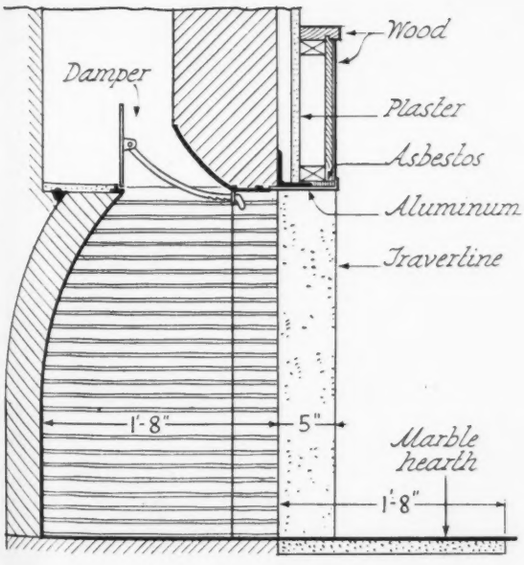


RICHARD J. NEUTRA *Architect*

RICHARD GARRISON



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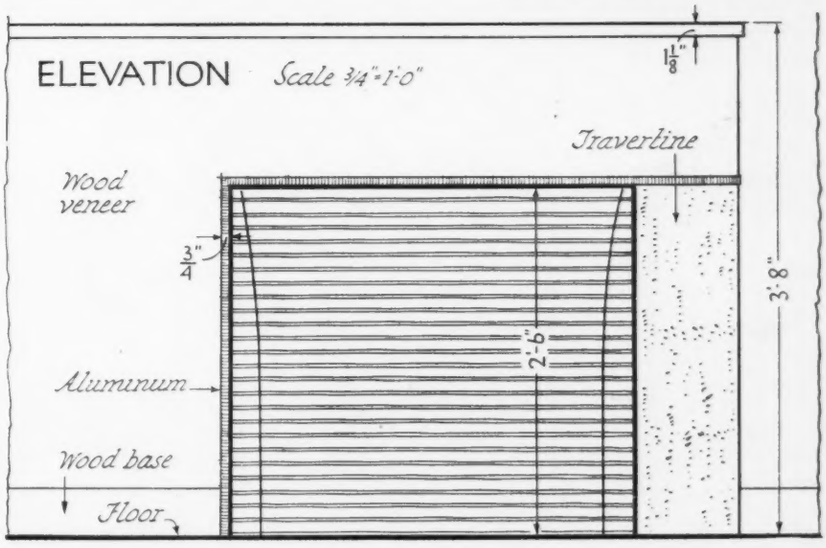
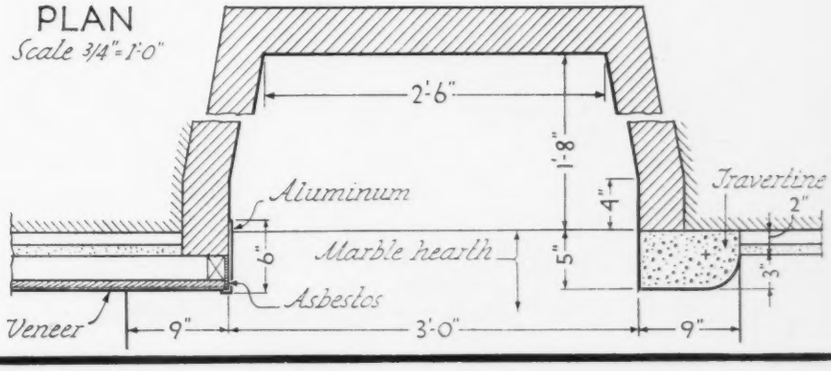
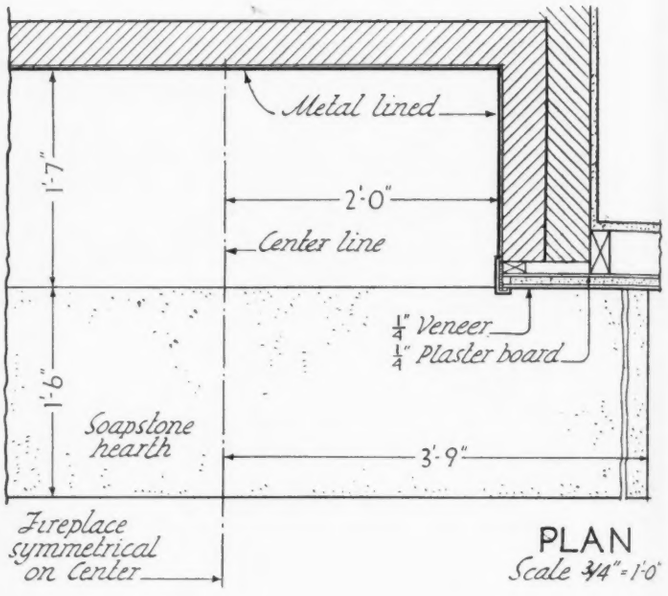




MORRIS B. SANDERS, Jr.
Architect

EDWARD D. STONE *Architect*



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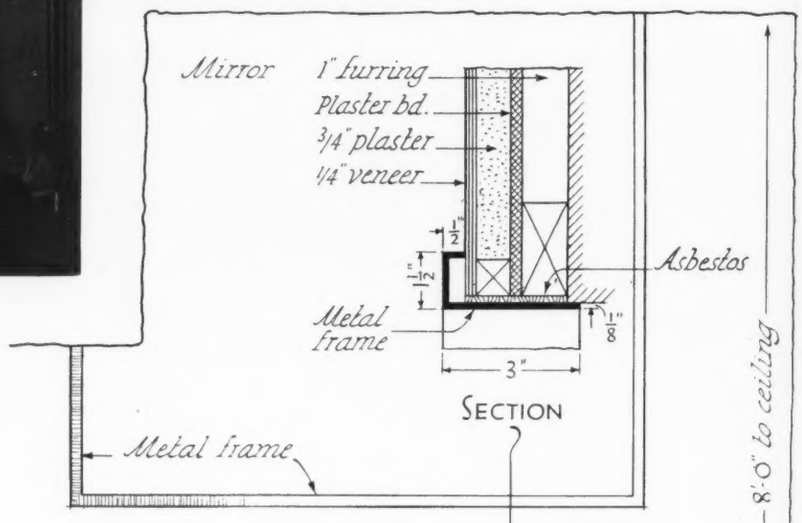
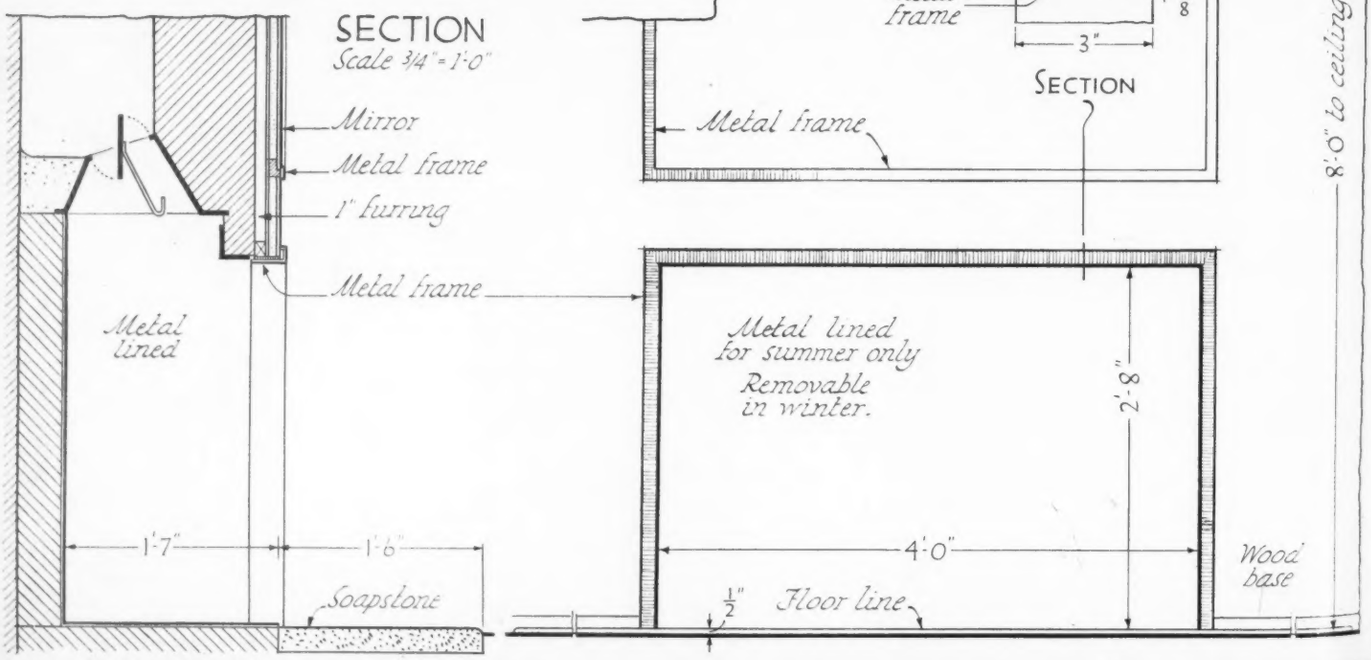
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